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Assurance Building Culture

ONESQA
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A Message from the Director

The Office for National Education Standards and Quality Assessment (Public Organization) ONESQA and Chairman of ICQA2014

The Office for National Education Standards and Quality Assessment or ONESQA (Public Organization) is organizing an International Conference on Quality Assurance, Quality Building and Quality Culture or QA QB QC, on 8-10 December 2014 at the Bangkok International Trade and Exhibition Centre. The International Conference: QA QB QC will be co-organized with the ASEAN Quality Assurance Network, the Asia-Pacific Quality Network, the International Network for Quality Assurance Agencies in Higher Education, the ASEAN University Network, and the SEAMEO Regional Centre for Higher Education and Development.

The main objectives of the international conference are to promote the sharing of lessons learned, exchanging best practices on educational quality assurance among international academic communities and providing a forum for academics and researchers to present their research findings and publications. Also, we hope that the international conference will promote networks in the academic community by means of amicable approaches toward educational quality enhancement, both nationally and internationally.

ONESQA is committed to collaborate with our international partners to work and develop quality of education standards that will be essential for integrating national and regional development for the emerging ASEAN Quality Assurance Framework to support the harmonization of higher education in the ASEAN Community in 2015. Therefore, ONESQA would like to urge the members of ASEAN and beyond to join hands to strengthen our dialogues and collaboration that will promote and facilitate the ever-increasing mobility of all quality assurance stakeholders in the community in order to achieve our common objective by enhancing Quality Assurance, Quality Building and Quality Culture.

In this regard, I would like to express my gratitude to all the speakers and researchers for their presentations during the ICQA2014. I hope ICQA2014 will be rewarding and all your expectations will be fulfilled. On this occasion, I would also like to express my appreciation for all the co-organizers for their contributions to the event. I am looking forward to seeing you again at the International Conference on Quality Assurance 2015: Breaking Barriers towards a Millennium of Quality on the themes of Quality Development, Quality Enhancement, and Quality Framework to be organized on 14-16 October 2015 at BITEC, Bangkok, Thailand.

(Prof. Dr. Channarong Pornrungroj)
Director, ONESQA

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International Conference on Quality Assurance, Quality Building, Quality Culture

Introduction

The Office for National Education Standards and Quality Assessment (ONESQA) is a public organization in Thailand that was established by the 2000 Royal Decree to comply with the stipulation of the 1999 National Education Act. It is an academic body specializing in educational quality assessment that will enhance the quality of education throughout Thailand and enable the educational institutions to provide quality education to the Thai learners who will be endowed with virtue, competency and happiness. Further, ONESQA aims to attain quality by placing emphasis on the importance of streamlining the assessment system, thereby improving assessment methods and strengthening the recognition of the developed standards.

As Thailand becomes part of the single market system in 2015 under the ASEAN Community, ONESQA's goal is to achieve the highest efficiency as an external quality assessment agency to ensure quality education standards are shared, improved and promoted within the ASEAN Community.

Objectives

The objective of the International Conference on Quality Assurance 2014 (ICQA2014): Quality Assurance, Quality Building, Quality Culture is to promote the quality assurance practices which include good assessment, better attitudes, and achievement. In order to enhance quality culture, it is essential to break barriers and behaviors as well as to create appropriate and effective benchmarks, which will be beneficial to all parties involved in the ASEAN Community and beyond.

In addition, this conference will provide a network of updated knowledge and to share innovative ideas by educators and assessors in the field of educational quality assurance, in early childhood, basic, vocational, and higher education levels. The participants will also have opportunities to exchange information vital to external quality assessment.

Rationale

At the end of next year, Thailand will become part of the single market system under the ASEAN Economic Community (AEC). One of the ONESQA's strategies is to disseminate information to all concerned to recognize the importance of educational quality assurance. However, in order to achieve highest efficiency as an external quality assessment agency to ensure quality education, ONESQA has realized the value of establishing an international forum as a means to distribute to the public all publications, ideas, and information relating to external quality assessment which is considered beneficial for educational evaluators, assessors, researchers, and other interested academics. This conference will establish a network of updated knowledge and innovative ideas shared by educators and evaluators in the field of educational quality assurance, and of the external quality assessment. It is believed that the outcome of the conference will provide efficient and effective assessment methods and criteria for the practice of quality assurance.

Participants

The conference will be of interest to all stakeholders related to quality assurance throughout Thailand and the ASEAN Community, as well as policy makers and practitioners in the field of quality assurance from all regions.

Theme:

Quality Assurance, Quality Building, Quality Culture

QA: Assurance

Attitude
Assessment
Achievement

QB: Building

Breaking Barriers
Behavior
Benchmarking

QC: Culture

Cooperation
Competition
Creation

Conference Partnership

Asia-Pacific Quality Network (APQN)

A network of quality assurance agencies in higher education in Asia-Pacific countries.

APQN has provided good practices for quality assurance to its members and enhance the quality of higher education in Asia and the Pacific region through strengthening the work of quality assurance agencies and extending the cooperation among them.

The network has been expanded and developed through cooperation of its members and support from external bodies, particularly World Bank and UNESCO.

For more information, please visit **http://www.apqn.org/**

ASEAN Quality Assurance Network (AQAN)

AQAN was established by 10 ASEAN quality assurance authorities in order to promote harmonization of higher education and to share good practices and strengthen quality assurance in Southeast Asia region.

AQAN has developed the ASEAN Quality Assurance Framework with a view to facilitate the recognition of qualifications and cross-border mobility.

For more information, please visit **http://www.mqa.gov.my/aqan/**

ASEAN University Network (AUN)

AUN was founded in 1995 by ASEAN member countries. In 1998, AUN-QA was created to coordinate activities concerned with the harmonization of educational standards and continuous quality improvement of ASEAN universities.

For more information, please visit **http://www.aunsec.org/**

International Network for Quality Assurance Agencies in Higher Education (INQAAHE)

INQAAHE is a global association of quality assurance agencies and relevant bodies. The network has offered its members various services, such as, academic journals, a good practices database, conferences and workshops.

For more information, please visit **http://www.inqaahe.org/**

Southeast Asian Ministers of Education Organization Regional Centre for Higher Education and Development (SEAMEO RIHED)

SEAMEO RIHED is the South-East Asian Ministers of Education Organization Centre specializing in regional higher education development. RIHED's mission is to foster efficiency, effectiveness, and harmonisation of higher education in Southeast Asia through system research, empowerment, development of mechanisms to facilitate sharing and collaborations in higher education.

For more information, please visit **http://www.rihed.seameo.org/**

Office of the Higher Education Commission (OHEC)

Office of the Higher Education Commission (OHEC) is mandated to administer both public and private higher education institutions in Thailand. The main functions of OHEC include the supervision on the establishment of higher education institutions by means of accrediting their curricula, mobilizing of resources, regulating quality assurance system, supervising student development and services. OHEC is under the legal direction of the Ministry of Education.

For more information, please visit **http://www.mua.go.th**

Keynote Speakers

Quality Assurance and Accreditation of Educational Institutions (Opening Ceremony)

Prof. Dr. Yongyuth Yuthavong
Deputy Prime Minister of Thailand

On behalf of the conference's organizing committees and all participants here, I would like to express my gratitude to the Deputy Prime Minister for officiating the opening ceremony of the International Conference on Quality Assurance 2014 today.

According to the National Education Act of B.E. 2542 (1999), educational quality assurance is enacted to develop quality and standards of all educational institutions. ONESQA was established as a public organization, under the supervision of the Prime Minister's Office. It is responsible for developing criteria and methods for external quality assessment, and to conduct external quality assessment with a view to monitor the quality of educational institutions. It is mandated by law that every institution must receive an external quality assessment once every 5 years. ONESQA also has to present results of external quality assessment to the Prime Minister, relevant sectors, and the public.

ONESQA has conducted external quality assessment for the past 14 years, and hosted several international conferences. The main theme of the ICQA 2014 is "Quality Assurance, Quality Building and Quality Culture". The conference also serves as a stage to present ONESQA's results of operation to the public, and allows researchers to present research relating to educational quality assurance, and relevant themes, with a view to prepare for the upcoming 4th round of External Quality Assurance (2016-2020). The conference starts today, the 8th of December and concludes on the 10th of December at the BITEC in Bangkok, Thailand. Participants of the conference include administrators, academics, teachers, lecturers, external quality assessors, and educational staff. The conference anticipates more than 8,000 participants from all educational sectors and relevant bodies, and educational institutions including higher education institutions, vocational education institutions, basic education institutions, and childcare centres from Thailand and other countries. These include 75 international participants that are here today and originate from 22 countries. Some of the few keynote speakers include Dr. Carol L. Bobby, President of the International Network for Quality Assurance Agencies in Higher Education, and Dr. Angela Hou Yung-chi, Vice President of the Asia-Pacific Quality Network. Other experts in educational evaluation and assessment that will be giving speeches including Dr. Haroon Rashid, Mr. Tony McAleavy, Prof. Zita Mohd Fahmi, to name a few, and also other important guests that are not mentioned.

The main activities in the conference include:

• 44 parallel lectures and discussions in Thai that will be delivered by Thai experts. These topics comprise the "Building of Quality Culture", "Indicators and the 4th External Quality Assessment System that are Aligned with the Government's Policy on Education", "12 Thai Values that were Determined by the Government", "Application of Assessment Results in Educational Quality Development", and "ASEAN and Internationalization for Modernization".

• 10 Keynotes and research presentations in English will be presented by international experts and Thai participants. The theme of these sections is "Quality Assurance, Quality Building, Quality Culture". The sections aim is to build quality culture, encourage and develop external quality assessment, initiate innovation and cooperation in education with regional and international education bodies.

• A Meeting of the ASEAN Quality Assurance Network Executive Committee.

• Exhibitions of work and cooperation from quality assessment and quality assurance from national and international organizations, including ONESQA, ONESQA's networks, educational institutions of all levels and their parent organizations, local authorities, communities, and other relevant bodies.

• Other meetings, performances, and activities

Now, it is opportune time. I would like to invite Mr. Deputy Minister to open the conference.

Please, Mr. Deputy Minister.

According to the Thai dictionary, assurance is to guarantee something. Therefore, educational quality assurance is to guarantee the quality of education by establishing standards of quality in management and operation of an institution's missions. These standards are part of the continuous development that are relevant to all stakeholders.

ONESQA was established as a public organization by the National Education Act of B.E. 2542 (A.D. 1999). It is responsible for developing criteria and methods of external quality assessment, and conducting an assessment for educational institutions to monitor whether institutions have provided quality education.

An assessment is then to verify an institutions' status regarding the quality and standards of education. The assessment mainly focuses on the readiness of human resources, the quality of curriculum and educational provision, readiness of infrastructure, materials and facilities, readiness of financial budgets and its allocation, the relationship with students and stakeholders, the ability to develop continuously, and so on.

The operation of ONESQA has achieved certain goals. It has conducted external quality assessments for 3 rounds, and each round comprises 5-years for each time frame. Currently, it is working on the upcoming fourth round. It has also initiated new innovations, for example, encouraging cooperation among educational institutions as seen in "the 1 4 9 Project", created by ONESQA's director, and the Area-based Assessment that aims to draw an overview of quality in specific areas.

There are differences between assessment, accreditation, and quality assurance. Assessment is a step to accreditation and quality assurance. Assessment could be conducted by the institution itself (internal quality assurance), or by external agencies (external quality assessment). Accreditation is to present to the public that an institution has passed the external quality assessment. Lastly, quality assurance is to guarantee the quality of the institution.

Quality assurance originated from the industrial sector. Firms designed programs to increase the quality of their products. At first, there was quality control that only stressed the last step of manufacturing, and then the concept was gradually developed, and became quality assurance, which focuses on every step of manufacturing, including management.

W. Edwards Deming suggested an idea relating to quality assurance. He proposed a cycle of "Plan, Do, Check, Act" (PDCA), which emphasizes all processes of production. Quality assurance, therefore, requires cooperation from all stakeholders of an institution, especially administrators, who play a vital role in support and management.

It could be said that Deming's PDCA is an initiation of quality assurance. According to his cycle, Plan refers to curriculum, teaching and learning, facilities and materials, timetable, and evaluation. Do stands for putting plans into actions. It includes teaching, testing, and so on. This requires cooperation from teachers and students, and flexible actions when there are problems. Check focuses on an assessment of actions. It can be done by oneself, or relevant stakeholders, for example, parents and communities. Parents may have opportunities to assess teachers. Finally, Act is to overcome barriers to actions, and to prevent possible problems. It also provides a lesson for further development. Once Act is finished, the cycle begins again.

There are also ISO 9000 and Quality Awards. These are quality assurance systems in the industrial sectors. Business owners have to seek certification, or an award, while preparing their firms for external quality assessment. There are also organizations that provide training and accreditation to firms, for example, the International Organization for Standardization (ISO) and the National Institute of Standards and Technology (NIST), which was made by the Malcolm Baldrige National Quality Award (MBNQA).

There is the Thai Foundation of Quality System that is supervised by the National Science and Technology Development Agency. It is used to assess basic quality of each firm. The system includes Self-assessment (First Party), followed by the second stage of IQA within the Second Party (parent organization). There could be a Third Party from external agencies to assess and accredit quality of the firm. The assessment emphasizes quality plans and policies, human resources and training, document systems, quality control systems, and purchasing. The methods of assessment consist of 2 main steps. First, relevant documents have to be revised before conducting an assessment. Administrators, supervisors, and employees will be assessed through observation and empirical evidence. The assessment is based on scales of 0 to 4. A firm must achieve at least 3 in order to be certified.

The Thailand Quality Award started with the formal signing of an MOU between the Thailand Productivity Institute and the National Science and Technology Development Agency on September 5th, 1996. It was established in the 9th National Economic and Social Development Plan, and the National Economic and Social Development Board had had cooperation with other organizations, both public and private. Also, with its implementation, it has promoted, supported, and encouraged other organizations to strive toward achieving the Thailand Quality Award in order to maximize the quality of management.

Values and concepts of the Thailand Quality Award are related to many domains. An organization must have a systematic vision to lead, placing emphasis on customers' satisfaction, encourage organizational and personal learning, and strengthen the quality of human resources and relationships with its allies. Further development in regards to valuable outcomes, and innovative and practical management should be explored as parts of the concepts. Most importantly, an organization should consider intensifying its social responsibility endeavor.

Compared to other quality assurance frameworks, it is clear that ONESQA has experienced many difficulties and burdens. Firstly, it is mandated in the National Education Act that ONESQA has a responsibility to assess every institution in Thailand. As a result, ONESQA has to carry a massive workload, although it has employed external assessors. To overcome this barrier, the National Education Act should be revised that would allow ONESQA to take external quality assessment of sampling groups according to statistics. Secondly, ONESQA's indicators contain too many criteria, and it seems that indicators focus on quantity outputs rather than on quality outcomes. ONESQA should reconsider its indicators by reducing number of criteria, and the indicators must focus on quality outcomes. The levels of quality should be in groups rather than in decimal percentages. Finally, ONESQA's main mission seems to be assessment, although accreditation is included in the National Education Act. Therefore, ONESQA must aim to accredit institutions rather than to assess institutions for auditing.

There are possible suggestions for good indicators. First of all, indicators must be able to distinguish characteristics of an institution. In other words, the main emphasis should be on students, teachers, internal affairs, and relationships with stakeholders. Sub-criteria could be included, but they must be valid and reliable. Again, the results must be easy to understand. They should be categorized into groups, rather than decimal numbers.

Quality assurance in education has 2 more points to be underlined. Education is unlike industry. While quality assurance in industrial sectors aims to produce the same high quality products, quality assurance in education cannot do so because of differences among individuals. Another important topic is that the educational institution not only provides skills and knowledge to students, but it also must develop students' attributes such as, critical thinking, problem solving, and life-time learning skills.

ONESQA should apply the carrot and stick approach to assessments. In the institutions' view, they felt that they had been checked and audited through the past assessments. Yet, it would be of great benefit to further develop an assessors training to ensure a smoother process, with potentially increased positive outcomes. ONESQA has to provide support to institutions, especially to those that failed the assessments, in relation to institutional development. ONESQA could consider giving rewards to institutions that passed an assessment that obtain better results.

Lastly, my suggestions to ONESQA are the following. First, ONESQA should initiate a new method of operation that is to conduct an assessment based on voluntary basis. Second, ONESQA should learn from standards and criteria of international quality assurance agencies, and apply the new knowledge to formulate its future assessments. Most importantly, ONESQA needs to consider working more closely with allied organizations that include trainers and the certification of professional associations. As a result, a more effective accreditation system could be further developed and strengthened.

Internal Quality Assurance and the Development of Quality of Education

Admiral Narong Pipatanasai
Minister of Education

It is my pleasure to accept the invitation of ONESQA to give a speech about quality assurance today. When comparing educational institutions to firms, ensuring customers' satisfaction is critically essential. Therefore, educational institutions must guarantee the quality to all of their customers, or students, parents, employers, and other stakeholders.

I would like to present my perspective on quality assurance. As mentioned, internal quality assurance guarantees quality education to students. This is for the development of students' knowledge and characteristics. Internal quality assurance also serves as a part of continuous development. So, who might be responsible for internal quality assurance? Educational institutions play an important role in doing so, but it requires cooperation from teachers, parents, administrators and students, too. The institutions must establish a relationship with communities and its people, and other organizations. This is the key to internal quality assurance. Relevant stakeholders should be involved in such processes.

First of all, internal quality assurance requires team work, and a management scheme. Most importantly, the institutions need educational development plans. The plans must determine clear goals and strategies as a guideline for staff. There should be staff that is responsible for establishing criteria for internal quality assessment and conducting internal quality assessment.

These processes determine to which level an institution achieves its goals. As the Deputy Prime Minister said earlier in his remarks, quality assurance is a cycle. I have noticed that internal quality assurance is a systematic process. Based on my experience as a soldier, everything must be planned. A plan is a strategy that is prepared in advance. According to the military practices, before taking plans into implementation, the plans need to be revised as there might be changes, much depending on the situations. When the plans are approved, they are then implemented. Soldiers may use plans to contest with the adversaries, and after the operation is done, the actions must be assessed and evaluated. The results can teach us lessons. We can learn from our mistakes and make better plans for further development. This cycle is very similar to education. I believe that every administrator might experience this cycle in the educational institution. The cycle must be always developed, as well as discussed.

It is generally recognized that internal quality assurance includes 3 main principles. The first is decentralization, which allows institutions to express themselves. It also provides authorities to manage themselves in every domain. The second principle is about the involvement of all stakeholders, including communities, parents, and other organizations. Lastly, internal quality assurance must have transparency. In other words,

institutions should allow inspections from other organizations. Actually, there are more principles that should be harnessed, but I think that these 3 aspects are the most important.

As the Minister of Education, I shall talk about decentralization. This has already been stressed in the policy with a view to allow more autonomy to institutions. I have discussed this with administrators at the Ministry. If the autonomy of institutions are limited, we should initiate a pilot project that enables 20 educational service areas to select 15 educational institutions to become a good sample for this project. We have invited the administrators of educational service areas, and institutions to attend a workshop to discuss their roles when institutions have more autonomy. There are around 300 institutions from all parts of the country participating in the project. When the outcome is reached, we may possibly be able to implement the policy after 1 January 2015. However when institutions are enjoying more autonomy, there will be an assessment at every 3 months to monitor and check whether the institutions have improved. If the project is successful, more educational service areas will be expanded.

The Ministry also plans to develop additional human resources. In the past, there were just workshops in hotels, but we aim to reduce these because it took a huge amount of time and financial resources. The next step will be to develop coaching teams, who will approach to teachers in their respective areas.

I would like to talk about ONESQA, but it may not suit the topic. ONESQA's duty is to project perspectives of an institution from an external view. Results of ONESQA's assessments are important because they can serve as a comparison with internal quality assurance. Therefore, there are 3 important roles for ONESQA to play. The first role is that ONESQA has to determine standards of quality. In addition, ONESQA must provide knowledge and understanding concerning quality assurance to institutions, and ONESQA's assessment ought to have a strong validity and reliability for the sake of the public.

In order to do so, there are 8 steps that ONESQA need to heed as follows:

1. Assessment standards and criteria must be aligned with educational institutions in the international community and they must be suitable for Thai contexts.
2. External quality assessment's standards and criteria must not be considered as a burden to institutions.
3. Communication channels to spread the knowledge about assessment should be initiated to provide advice concerning assessment to institutions.
4. Quality and standard of assessors should be further strengthened and certified in order to assure their quality.
5. Effective criteria for the evaluation of assessment teams should be fully implemented.
6. Random sampling for external quality assessment should be encouraged for some sort of educational institutions, rather than conduct assessments for every institution.
7. Educational development plans must be compulsory as a result of EQA.
8. External quality assessment results and suggestions must be presented to the public more rapidly.

Furthermore, ONESQA's assessment should be based on an institution's needs. The institution then knows which aspects that is to be developed; hence the institution will have a better perception on ONESQA's assessment. Consequently, ONESQA should accept comments from institutions and assessors that could be used for further development.

Quality Culture: Cultivate Citizens & Nurture Nations

Prof. Dr. Channarong Pornrungroj
Director of Office for National Education Standards
and Quality Assessment (Public Organization)

President, ASEAN Quality Assurance Network (AQAN), and Director at the Office for National Education Standards and Quality Assessment (ONESQA), Thailand, and serves as a board member for APQN and NTS – Pakistan.

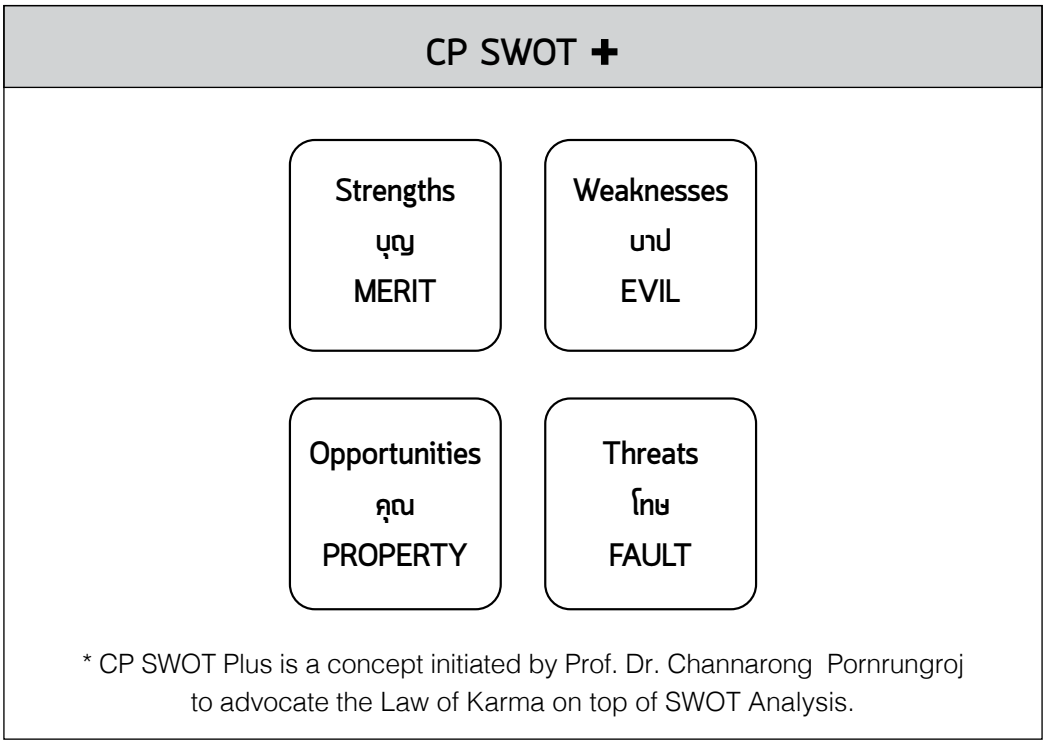
Prof. Dr. Channarong is the Director of the Office for National Education Standards and Quality Assessment (ONESQA) that is responsible for External Quality Assessment (EQA) of educational institutions at all levels throughout Thailand. He has a strong academic background related to Higher Education, Quality Assurance and Human Resource Development as demonstrated through his career at Chulalongkorn University, and as the Secretary-General of the Council of University Presidents of Thailand. Additionally, he is the Founder and President of the Art for All Foundation that uses the arts to improve the quality of life for people, both with and without disabilities.

Abstract

What embeds quality culture deep in Thailand's education system? Precisely how does an educational institution benefit as a result? These questions were at the heart of our "quality culture" assessment areas.

The nature of educational institutions has dramatically changed over the last two decades. They have changed from being traditionally educational institutions to mass educational organizations with a responsibility towards a steadily growing part of the population, a trickle-down effect of economics during the 60s and the upcoming free trade area in ASEAN. Furthermore, those institutions are increasingly engaged in the provision of management tools for continuing professional development for excellence in related fields.

A way to create a quality culture in educational institutions is to build harmonization to cultivate citizens and nurture nations. It proposes three essential keys of quality: 1) quality awareness 2) quality of life and 3) good governance and CP SWOT Plus*. This will serve as a tool for an educational institution to strive for the enhancement of quality teaching and learning as well as development of graduates' attributes that meet the need of the labor market.



The concept is seen as a means to enhance quality culture. The basic element is described among the three essential keys above and CP SWOT Plus, according to the demands of each individual educational institution. It is suggested as a tool to enhance the quality as well as promoting the effectiveness and efficiency of an educational institution.

The quality culture has to be acceptable and agreeable to all parties. The responsibility of all parties involved must be clearly expressed and understood. Accountability and interdependence are key elements in the process of implementing and running the quality culture. The idea should be accepted and maintained as an integral part of an overall quality culture that we have expected.

Keywords: quality culture and educational institutions

The ABCs of Building Quality Cultures for Higher Education in a Globalizing World

Dr. Carol L. Bobby
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President & CEO, Council for Accreditation of Counseling and Related Educational Programs (CACREP)

President, International Network of Quality Assurance Agencies in Higher Education (INQAAHE), 2013-2015

Abstract

The process of defining, measuring, and assuring quality in higher education has been influenced by the quality movement that began originally in business and industry. The notion of building quality cultures, whereby all parties with a vested interest in the success of the enterprise take responsibility for insuring qualities at all levels, requires fostering a set of shared beliefs and values, along with developing a structure for coordinating quality reviews at multiple levels that will occur cyclically.

The establishment of quality cultures within higher education transforms how quality has been defined within this system – moving it away from a single status definition of quality (e.g., reputation or accredited status) to one requiring the examination of multiple measures that address the needs and perspectives of major stakeholder groups within higher education. Five of these major stakeholder groups are institutions and faculty, students and their families, employers of graduates, professions, and governments. Each of these different stakeholder groups also has different perspectives on how quality in higher education might need to be defined and measured.

Emerging new paradigms for building a quality culture in higher education must incorporate the varying views of different stakeholder groups if higher education plans to address the accountability demands being placed on the system. The building blocks or ABCs of the new paradigms include building Awareness among all stakeholders, finding the appropriate Balance between the needs of the higher education institutions, its external quality assurance agencies, and the public, and committing to the development Cooperative processes that will lead to a greater understanding of quality by all stakeholder groups. Additionally, the new paradigms must insure that quality assurance processes remain flexible and responsive to changes in society, including technological changes and the globalization of economies.

Keywords: Quality Assurance, Quality Culture, Higher Education, Accreditation

Origins of the quality culture movement

The notion of establishing quality cultures arose from the world of business and industry. At the core of this notion are two key ingredients. The first ingredient is a focus on meeting or exceeding customers' expectations for high quality products or services. The second ingredient is for the business to foster an environment whereby all employees are invested in creating and providing excellent products and/or services to the consumer. Thus, the establishment of a quality culture in the business world requires each and every person who is involved in the business or organization – from high level managers all the way down to the employees working on an assembly line – to understand that they have an important role to play in offering the quality service or product. Quality is, therefore, a responsibility of everyone at each level of the company.

The development of quality cultures can be traced back to the 1930s when a gentleman by the name of Shewhart began working on statistical quality control concepts for the Bell Telephone Company in the United States. The value of creating quality cultures within business was not, however, widely accepted until much later. This occurred in the 1980s when the entire world began to notice that Japanese automobile manufacturers were outperforming their competition in sales and customer satisfaction. Simultaneously, competitors began to realize that consumers also preferred buying electronic products that had been made in Japan. Naturally, companies in the United States, such as Ford, General Motors, and RCA began seeking out the reasons for their loss in stature to the Japanese products. This is when the ideas of W. Edwards Deming and the post-World War II consultations he conducted in Japan to help rebuild the war-torn country began to come to light.

Deming's work had expanded the previous statistical quality control concepts of Shewart to include his own idea involving all employees in quality control examination their work. It was from this point forward that the term "quality" with all of its other iterations–total quality management, quality planning, quality controls, quality assurance, continuous quality improvement–and the establishment of quality awards such as the Deming Prize or the Baldridge Award came into the awareness of not only business and industry, but also higher education. It was at this point that higher education also began to review the utility of its own quality assurance processes, such as institutional and programmatic accreditation, and began to change its own understanding of what constituted good quality assurance processes in higher education. No longer could higher education rely on institutional reputations or external top down review process to determine quality. Building a quality culture in higher education now required the development of more organic internal quality assurance processes.

Defining Quality in Higher Education

The discovery of Deming's ideas changed the world's view of how quality is achieved and how quality is defined. There is no longer a single definition of quality being applied to an output. Nor is there a single statistic that measures quality. Quality and the measurement of it has instead become a process, whereby a business, an organization, and even institutions of higher education strive for continuous improvement across time. Under this new construct, quality can and does change as expectations change. Thus, measuring quality requires a circular process where, according to Deming a vision is created (AIM), building relationship and creating interconnectivities occurs (PLAN), giving the plan a try happens (DO), assessing and analyzing the results occurs (STUDY) and deciding what works and what does not work happens (ACT). Deming's Aim-Plan-Do-Study-Act cycle then begins again, as an ever continuous cycle spiraling toward improvement.

Although today's view of quality eludes a single definition, an understanding of the various ways that quality can be conceptualized within the continuous improvement cycle is important. It is especially important to understand the ways that quality has been conceptualized within higher education and understanding how quality cultures fit within this arena.

In their 1996 book, Transforming Higher Education, Lee Harvey and Peter Knight made the following two statements in the opening sentences of their first chapter–"We can no longer take 'quality' for granted in higher education. We can no longer presume we know what we mean by a 'quality' higher education." They further note that although there have been "widely differing conceptualizations of quality in use in education" ranging from viewing quality as exceptional or distinctive to perfection (zero-defects), fit for purpose, a good value for the money, and finally as transformative, that elements of each of these has played a pivotal role in the development of functional quality cultures in higher education (p.1).

According to Harvey and Knight (1996), the five concepts of quality can be ascribed the following meanings:

- quality as exceptional–focuses on expectations and achievement of meeting exceptionally high standards
- quality as perfection (or consistency)–focuses on processes and their specifications resulting in no errors or in consistently reliable performance
- quality as fitness for purpose–focuses on whether the product of service states is meeting its purpose(s)
- quality as value for money–focuses on getting a good return on an investment or expenditure
- quality as transformation–focuses on whether a process brings about a qualitative change
  (e.g., education adding value to students and empowering them)

An examination of each of these five conceptualizations of quality against the context and purposes of higher educational institutions within any given society further reveals why a single definition of quality for higher educational institutions will fail to satisfy the needs of the public being served by this educational sector. The public being served by higher education includes five major stakeholders groups. They are

- Higher educational institutions and their administrators, faculty and staff
- Students and their families
- Employers of graduates
- Professions (e.g., nursing, architecture, business, engineering)
- Governments and nations

Because each of these stakeholder groups views the context and purposes of the institution from different perspectives, each group also requires quality to be defined differently. As noted by Cullen, Joyce, Hassall & Broadbent "the key issue [will be] the ability of the quality concept to facilitate the perspective of a range of stakeholders who have different conceptions of higher education" (2003, p. 6).

Borrowing from the work of Koslowski, (2006) who aligned different definitions of quality with stakeholder groups, Table 1 below shows how the five concepts of quality put forward by Harvey and Knight (1996) intersect with different stakeholder groups' perceptions of quality through the various questions that each group might ask with regard to quality.

Table 1

Stakeholders	Concept Categories for Defining Quality in Higher Education				
	Distinctive or Exceptional	Perfection (zero-defects)	Fitness for Purpose	Good Value	Transformative
Institutions/ Faculty, Programs, Administrators	Where is this institution ranked against other institutions?	Does this institution meet all of the EQA Standards, even if minimally?	Is the institution meeting its mission, goals and objectives?	Does this institution offer support resources?	How will our QA processes – internal and external – help us improve?
Students/Families	Is this school prestigious? Is this institution highly ranked? Is this a good party school?	Will the school prepare me (my child) to pass my (his or her) examinations on the first try?	Will this institution prepare me (my child) for my (his or her) chosen field of work?	Can a degree be completed in four years or less? Can a good education be obtained at a reasonable price?	Will this institution provide me (my child) with a different way to approach life? Will it teach me (my child) how to be a critical thinker?
Employers		Will I have to retrain the new graduate that I just hired? Can the graduate "hit the ground running" when they start this job?	Does the institution understand the needs/ expectations of the employment setting and appropriately orient their graduates to work in this field?		Does the institution prepare graduates who understand how to work with others and be flexible and adaptable to changing forces?
Professions	Which institutions consistently graduate leaders in the field?	Can this school's graduates pass the licensing examination?	Does the institution prepare graduates to enter in the field?		Do this school's graduates embody the values of the profession? Can this institution's graduates practice competently and ethically? Are this school's graduates ready to serve as leaders in the profession?
Governments/ Nations	Is this institution world-renowned and will it attract foreign nationals to seek an education in this nation?		Does the institution prepare graduates who can support our economy and use our natural resources? Will it prepare graduates who can support the country's economic growth?	Will this institution prepare students for gainful employment without incurring high debt? Will it prepare graduates who can insure this country can become or remain competitive in the global market?	Will this institution prepare its graduates to be good citizens? Will it prepare graduates who can insure this country can become or remain competitive?

The variations in the types of questions posed by the different stakeholder groups demonstrates the influence that individual perspectives have on determining how a quality education can be defined. Table 1 illustrates that quality is clearly tied to perceptions. Yet there are two additional influencing factors beyond perceptions that influence how quality may be defined for a higher education institution. The first factor is context. For example, the quality of an institution may be determined by its ability to contribute to the economic growth of a particular nation's economy. Thus, if the nation's policy is to develop alternative energy sources to reduce the country's reliance on oil producing regions of the world, then one determination of quality might be the development of programs and the production of research in sustainable development engineering. The second factor influencing how quality is defined is its relational nature. The fundamental reason businesses, organizations and higher educational institutions even care about quality is to build and sustain relationships with their constituents. In business, these constituents are hopefully satisfied customers who will buy again. In service industries, these constituents are the customers who will use the service again or be protected by a record of safety. For higher educational institutions, these constituents are the stakeholder groups who have a vested interest in the potential outcomes of investing in the educational system.

A Call to Measure Higher Education Quality from Multiple Perspectives

For over ten years, higher education has suffered criticism from all of its stakeholder groups. Students and their families have bemoaned rising tuition rates. Governments have called for greater transparency and accountability to the public on issues such as the cost of higher education and the gainful employment of graduates. Nations have called for higher standards in the preparation of graduates who will excel in science and technology jobs and maintain global competiveness of the country. Employers have complained that they must retrain college graduates once they have been hired. In addition, the rapid changes in technology that have occurred in the last 20 years have placed further demands on higher education, both in terms of building infrastructures to handle the new demands for the internet and new modes of course delivery and in responding to calls for more publically available information. Simultaneously, there has been a rise in the creation of new global ranking systems purporting to define quality along with a rise in the growth of both diploma and accreditation mills.

The rapidly changing landscape of higher education has also challenged the status quo of how quality assurance reviews can be conducted. Higher education is no longer offered only in brick and mortar environments, where the buildings are covered in ivy and the students are browsing among the stacks of books in the library. Instead, quality assurance reviews conducted by external organizations must consider a variety of ways that institutions are structured from looking at what is offered by 2-year schools (career & technical, community colleges), 4-year or more degree granting institutions (liberal arts, research based, bachelors only vs. graduate schools), fully online institutions, cross border institutions, for profit corporate structures, and other mixed

learning environments. In addition, there is a variety of new ways that higher education is delivered, credentialed, and given value ranging from competency-based education (no credit hours) to prior learning assessments (living life and working counts for credit), digital badges (the Boy Scouts model), and MOOCs or other free or low cost individually offered online courses.

The questions being asked about the quality of higher education by the various stakeholder groups have demanded answers and called for change. It has become clear that the traditional ways of externally measuring and validating the quality of higher educational institutions and their programs are no longer adequate. As a result institutions and external quality assurance organizations (e.g., accrediting agencies) have been forced to re-examine not only how quality assurance in higher education should be conducted, but also how to build and sustain more meaningful relationships with the stakeholder groups who are involved in one or more aspects of the education enterprise. Such re-examinations have made the case for creating quality cultures for higher education that include the stakeholders to develop the quality assurance questions, to carry out the quality assurance processes and assessments, and to evaluate the results.

Establishing Quality Cultures in Higher Education

The European University Association (EUA) in its 2010 publication entitled *Examining Quality Culture: Part 1–Quality Assurance Processes in Higher Education* indicates that establishing a quality culture in higher education requires 1) a set of shared values, beliefs, expectations and commitments toward quality, and 2) a structural/managerial element with defined processes that enhance quality and aim at coordinating efforts. Furthermore, the EUA report identified five additional conditions that can lead to building an effective quality culture. Key aspects of these conditions are summarized below.

1. Use multiple measures to measure quality and choosing the measure that are not only related to institutional strategies and academic values, but that also provide accountability measure to students and the wider public.
2. Have a clear process and structure for effective internal decision-making with regard to setting up internal quality assurance mechanisms for how quality assurance will be carried out within the institution and its programs.
3. Engage the whole university community in the process through leadership that can foster debate and entertain new ideas.
4. Provide staff development that supports teaching and learning and promotes the concept of student-centered learning and measurement of student learning outcomes.
5. Recognize that internal quality assurance and external quality assurance must work together to provide true public accountability, but that negotiations between the two processes may need to occur to avoid duplication of efforts and QA fatigue.

Of note is the mention of choosing measures that provide accountability not just to the immediate consumer (i.e., students), but also to the wider public. Also of note is the need for both internal quality assurance and external quality assurance processes to work together to provide true accountability. These two comments lend strong support for developing a new approach to quality assurance in higher education that focuses on establishing a quality culture which includes a stakeholder approach to measuring quality assurance in higher education.

Great strides have already occurred in establishing quality cultures in higher education that use a stakeholder approach to defining and measuring quality. Institutions and accrediting organizations have already begun piloting new and emerging models of quality assurance, as the public's expectations for accountability have changed. For example, historically a major criticism of EQA was its focus on measuring quality through inputs or resources at an institution. But in the past 20 years, a shift has occurred from relying on an input model to measure quality to instead requiring institutions to provide evidence of student learning and student success. This shift did not happen overnight, nor is the shift complete. In fact, the changes in higher education mentioned previously–online delivery, competency-based (not credit hour based) education, shifts in the demographics of students, MOOCs and badges–have all created new challenges to measure the quality of an institution or its degree programs. As students or learners begin to cobble together courses from 3-6 different institutions or life experiences to earn a college degree, new shifts will need to be made to accommodate new models of higher education offerings. New questions will be asked, such as 1) what should a post-secondary degree represent?, 2) what does quality look like in a post-secondary environment without walls?, 3) how do new value systems, such as achieving a collection of badges or completing a series of competency-based experiences, measure up when compared to a degree based on credit hours earned primarily from one institution?

The establishment of quality cultures within higher education systems that define quality from stakeholder perspectives is imperative in today's rapidly changing and globalizing world. To accomplish this, institutions and their external quality assurance organizations must work together to address not only the internal quality measures needed by institutions to improve their operations and offerings, but also to address the external quality measures needed by the wider public seeking information and accountability. In addition, quality cultures in higher education must involve stakeholders in their discussions to insure that the cyclical nature of quality assessment and quality improvement incorporates the differing needs and changing perspectives of the major stakeholder groups. In fact, stakeholder involvement will occur at every level of the Aim-Plan-Do-Study-Act cycle.

At the Aim and Plan levels, quality cultures must engage in conversations with each stakeholder group to determine what they need from a quality assurance review of a higher education system. For example, institutions and external quality assurance agencies in a certain locale might call together local, national and international

employers and ask what knowledge and skills are imperative for graduates to succeed in today's global society. They might also engage in conversations with their government to determine how student access to a greater variety of educational experiences might be enhanced through partnerships or financial support. Conversations with students and graduates about what educational delivery options work and engagement with professions, who sets practice standards for working in the field about sharing research on what their members are doing and how their fields are changing, are two other ways that major stakeholder groups can become involved at the planning level.

One or more of the major stakeholder groups are natural participants at each of the levels of the quality assurance cycle, as faculty teach, students learn, external quality assurance agencies conduct reviews, employers hire, professions offer services to the public, and governments participate in global economies. In some cases, the stakeholders are the assessors. In other cases, they are the assessed. In every case, however, each stakeholder group has invaluable information to provide, if included in the quality assurance process. The key is to recognize and understand that each stakeholder group should have a voice in determining which quality factors will be examined and how the results can be made transparent for use by the public-at-large.

When redesigning quality assurance processes, it is important to acknowledge that there will be challenges ahead. Creating a quality culture that involves multiple stakeholders in the processes is no exception, but taking the time for appropriate engagement of the stakeholders creates a broad ownership that will assist in sustaining the new paradigm. Just as the initial phases of the Quality Culture project of the European University Association (2005 and 2006) noted that the introduction of internal quality assurance processes transformed institutions by promoting the establishment of quality culture, so will the broadening of the quality assurance processes to involve multiple stakeholders transform higher education systems.

One of the transformative results that has already occurred through an exploration of what quality means from a variety of stakeholders' perspectives is an awareness that at a very basic level each group's definition of what constitutes quality in higher education focuses at one or more levels of students' experiences and students' learning outcomes. As the common denominator that can be used to address the concerns for quality espoused by the varying stakeholder perspectives, a new model for quality assurance can be built to address questions such as the following:

- With regard to student access…
  - is there evidence that students have access to the knowledge and skills they need to attain to be successful?
  - is there evidence that students have the ability to be successful learners in their chosen area of study and, if not, is there evidence that the institution can assist those students in transitioning to more appropriate areas dependent upon their capabilities?

- With regard to student learning…
  - does the institution or program have evidence that the students have learned the basic and advanced knowledge and skills set forth in the institution's curricular objectives?
- With regard to student development…
  - is there evidence of appropriate student development that demonstrates the institution's objectives to create good citizens who can contribute to society, be productive, demonstrate critical thinking skills, work with diverse teams in a global world, be open to new ideas, and recognize the value of continuous learning?
- With regard to student success…
  - does the institution have evidence of student success after completion of a program of study?
  - Is the student gainfully employed?
  - Is there evidence that the student/graduate is valued by employers as having entry-level skills deemed necessary before hiring?

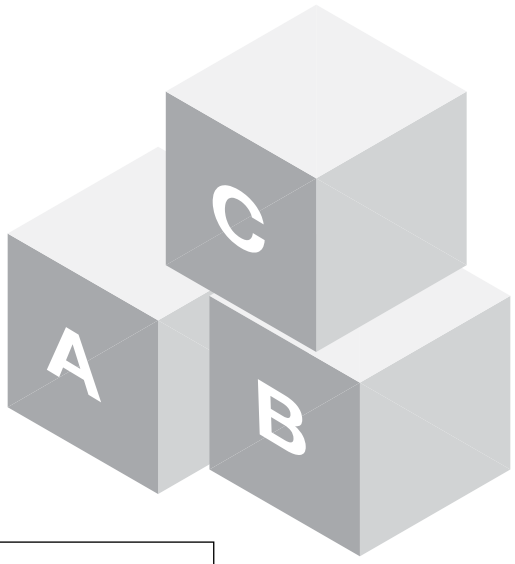
A focus on transforming students' lives as a primary purpose of higher education provides a foundation for the building and sustaining quality cultures in higher education. It provides the platform from which questions about quality can be asked at every level of the enterprise, the teaching that occurs in the classroom to the placement of graduates and beyond. It also provides the framework from which all stakeholder questions can be answered.

Conclusion

The process of defining, measuring, and assuring quality in higher education has been influenced by the quality movement that occurred originally in business and industry. The notion of building quality cultures, whereby all parties with a vested interest in the success of the enterprise would take responsibility for insuring qualities at all levels through a shared set of beliefs and values, transformed the view of quality in higher education from a single status approach (e.g., reputation or accredited status) to one requiring that multiple measures be examined that could represent varying stakeholder perspectives. In addition, the notion of sustaining the establishment of the quality culture in higher education created a need for new models of quality assurance requiring the coordination of effort among institutions, external quality assurance agencies, and the publics they serve.

The emerging new paradigm for building a quality culture in higher education must incorporate the varying views of different stakeholder groups to adequately address the accountability demands being placed on higher education systems. The building blocks for establishing this new quality culture can be summarized in the following illustration:

COOPERATION – Committing to cooperative processes to avoid quality fatigue and to improve communication will ultimately lead to greater understanding of quality and buy-in by all stakeholders.



AWARENESS – Quality culture always begins with quality awareness and quality ownership by all parties who have a vested interest in insuring quality for success.

BALANCE – Finding a way to balance the varying opinions of what constitutes quality from the perspectives of multiple stakeholders must be given attention in any quality process.

Illustration 1: The Building Blocks of Quality Cultures in Higher Education

In conclusion, finding the right new approach to assuring quality in higher education in the 21st century has begun and there is no turning back. In fact, in the race for quality there is no clear finish line. Seeking quality is a continuous process that feeds back into itself. As the context in which higher education institutions operate and as the needs of the stakeholders change due to globalizing economies, the development of new job markets, new advancements in technology and educational delivery systems, the way the expectations for what students need to know and to be able to do will also change. Quality cultures in higher education that build quality assurance processes based on awareness of quality issues and questions and an ability to balance the needs of multiple stakeholder groups' perceptions of what constitutes quality will be prepared to work cooperatively and in open communication with all who have a vested interest in the success of higher education in preparing knowledgeable and skilled graduates for the future of our nations and world.

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Building International Capacity of Quality Assurance Agencies: Quality Assurance of QA Agency in Asia

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Abstract

Cross-border higher education has created a need to build capacity, particularly in the internationalization dimension, for national quality assurance agencies to evaluate cross-border education provided by foreign educational providers or jointly by local and foreign institutions. This is quickly becoming a key issue in the Asia-Pacific region. National accrediting agencies in Asia, which implement accrediting tasks domestically, are attempting to internationalize themselves through internal and external approaches. The main purpose of the article is to analyze the impact of this cross-border accreditation on national quality assurance agencies in the Asia-Pacific region. The approaches that national quality assurance agencies adopt to enhance their internationalization and quality will be discussed, as will the efforts the regional networks make to help Asian quality assurance agencies build capacity.

Key words: cross-border higher education, internationalization, quality assurance.

Introduction

Since the 20th century, globalization has become a powerful force with profound effects on the internationalization of higher education throughout the world. The multifaceted processes and dimensions of internationalization in higher education are "integrating an international dimension into the purpose, goals, functions and delivery of higher education" (Knight, 2007, p. 134). One of the key elements of internationalization is cross-border education. Generally speaking, cross-border higher education refers to "student, faculty, institutional, and program mobility" (Daniel, et al, 2009). According to the "Education at a Glance" by the Organization for Economic Cooperation and Development (OECD), there were over 3.7 million international students in 2009. The United States, the United Kingdom, Germany, France and Australia are the five main destination countries (OECD, 2010). The Global Student Mobility 2025 Report predicts that the number of international students will increase to 7.2 million by that year (Bohm, et al, 2002). It found that the growth in overseas study had produced a whole new range of booming educational destinations, with a remarkable growth in the number of inbound students to New Zealand, the Czech Republic, the Netherlands, the Slovak Republic and the Russian Federation (Chiriliuc, 2010).

In recent years, student mobility in East Asia is also being driven, encouraged or impacted by a range of factors, including economic growth, national competitiveness, and regional development. One manifestation of the trends is a significant increase in the number of students moving within Asian campuses, such as in China, Japan, and South Korea. It was found that more than a half to three quarter of international students in Asian campuses comes from the other neighboring countries (British Council, 2008). According to the United Nations Educational, Scientific and Cultural Organization (UNESCO) 2007 Yearbook, there were 57,000 Korean students studying in China, comparing 23,000 Chinese students in Korea; 80,000 Chinese students in Japan and 23,700 ASEAN (the Association of Southeast Asian Nations) students in China (UNESCO, 2007).

Since cross-border higher education resulting in the mobility of students, academic staff, programs, institutions and professionals has grown in the era of globalization, ensuring that the quality of cross-border education meets both local and international standards has become a challenge in many nations, particularly in most Asian nations which just developed their quality assurance in the early 21st century. It points to the need to build capacity, particularly in the internationalization dimension, for national quality assurance agencies which can evaluate cross-border education provided by foreign educational providers or jointly by both local and foreign institutions. This is quickly becoming a key issue in the Asia-Pacific region. Because of the challenge from international accreditors undertaking programme or institutional accreditations at home, national agencies in Asia, which implement accrediting tasks domestically, are attempting to internationalize themselves through internal and external approaches.

Quality assurance of cross -border higher education

The internationalization of higher education raises issues such as recruiting international students, partnering with joint programs, becoming an educational hub, seeking the international accreditation, becoming world class universities, and developing international quality assurance systems from those used in the domestic context. These issues are strongly related to the theme of quality assurance of cross-border higher education. Over the past decade, many international organizations such as the United Nations Educational, Scientific and Cultural Organization (UNESCO), the World Bank, and the Organization for Economic Co-operation and Development (OECD) have started to pay more attention to the impact of quality enhancement in cross-border higher education on global economic growth (CHEA, 2002).

Due to the need to assure the quality of international activities in cross-border higher education, OECD and UNESCO developed international guidelines titled "Quality provision in cross-border higher education" to strengthen quality assurance, accreditation and recognition of qualifications schemes at both national and international levels. The guidelines clearly noted that students/learners should be protected "from the risks of misinformation, low-quality provision and qualifications of limited validity" in cross-border higher education. On a basis of this premise, national

qualifications of higher education should be readable and transparent to mobile professionals. In the guideline, the leading quality assurance and accreditation agencies are expected to intensify their international cooperation with other agencies and develop strategies to cover transnational higher education within national qualification schemes (UNESCO/OECD, 2005). With increasing cross-border higher education, the demand to review the quality of international programs and institutions has pressured national quality agencies to upgrade their level of international capacity as well as to enhance real collaborations between agencies and countries.

The World Bank (2007) identified four major types of cross-border quality assurance, including accreditation in the receiving country, accreditation in the sending country, regional accreditation and cross-border quality assurance. Each one has its features. In the first type, "accreditation in the receiving country", the accreditation of cross-border programs or institutions is carried out by local quality assurance agencies, which provide not only information to local stakeholders but also legitimacy. However, this can be costly and the standards for cross-border provision may differ. In the second category, "accreditation from the sending country", the accreditation will be conducted by the quality assurance agencies in sending countries. For example, English and Australian accrediting bodies help accredit cross-border programs and institutions abroad. However, the problem will likely be that accreditation consequences may not be recognized by the receiving countries or aligned with local context. In addition, the development of local cultures and practices of quality may be hindered. In the third category of "regional accreditation", the cross-border programs will be conducted by multinational agencies, such as the Foundation for International Business Administration Accreditation (FIBAA), the Accreditation Agency Specialised in Accrediting Degree Programmes in Engineering, Informatics, the Natural Sciences and Mathematics (ASIIN), or the European Quality Improvement System (EQUIS). The last type is "cross-border quality assurance", which is conducted by foreign quality assurance organizations in the local environment, such as the Association to Advance Collegiate Schools of Business (AACSB) International. It can provide information to local and international students, but can be delinked from local authorities or accrediting bodies. Also, several challenges arise, including the risk of preventing capacity-building by local quality assurance agencies and of commercializing the process of quality assurance due to high cost.

Different regions may adopt different types of cross-border quality assurance based on the national quality assurance systems. Take the United States for example, as the biggest exporter of quality assurance by "recognizing postsecondary educational provision in other national jurisdictions", it belongs to the category of "accreditation in the sending country" (CHEA, 2008, p. 152). It has developed real international quality assurance or accreditation activities carried out by the agencies (Van Damme, 2002). According to the Council for Higher Education Accreditation's (CHEA) survey, more than 40 American accreditors have undertaken international accreditation at over 385 institutions and programs in fifty-two foreign countries (CHEA, 2008; Hou, 2011a).

In Europe, the Bologna Declaration signed in 1999 paid specific attention to quality assurance. “Promotion of European co-operation in quality assurance with a view to develop comparable criteria and methodologies” focused on three main policies: the introduction of the Bachelor’s/Master’s degree structure; the mobility of students, staff and graduates; and the labor market and quality of higher education graduates (Europa, 2005). Reciprocal collaboration between quality assurance agencies is regarded as a major basis on which to enhance the mobility of students and graduates with accredited or quality assured qualifications in the European Higher Education Area (Heusser, 2006 ; ECA, 2007). To safeguard the quality of the cross-border higher education providers in Europe, the European Network for Quality Assurance in Higher Education (ENQA) was established in 2000 to promote European co-operation in the field of quality assurance (ENQA, 2011). Thirty-eight full members are required to be under review by ENQA’s Standards and Guidelines for Quality Assurance in the European Higher Education Area (ESG). They are making efforts to upgrade networking and exchanges toward real collaboration by taking part in cross -border mutual recognition projects, recognition of qualifications, or mobility and credit-transfer programs. Moreover, some countries have developed a system for the recognition of local and foreign quality assurance agencies, such as Germany’s “Accreditation Council”, and Netherland’s “Accreditation Organisation of the Netherlands and Flanders” (NVAO). Generally speaking, there are two types of cross-border quality assurance in European countries: “accreditation in the receiving country” and “regional accreditation”.

In Asia and other regions, the principal mandate of quality assurance systems established in the past decade is to accredit local institutions and programs. This means that “cross-border quality assurance” is mostly conducted in Asia. Yet, an examination of current developments in Asia makes it apparent that most quality assurance agencies have no capacity to undertake incoming and outgoing cross-border education reviews, but they have started to take this issue into consideration. For example, the Government of Hong Kong made provision for further quality assurance of non-local programs in Hong Kong through accreditation on a voluntary basis (Fan, Fearnside & Lee, 2011). In many of these non-local program accreditation, the Hong Kong Council for Accreditation of Academic and Vocational Qualifications (HKCAAVQ) is using an international chair and local panel members. The Taiwan’s government assembled a task force of ‘‘Local and International Accreditors’ Recognition’’ to give recognition to international accreditors (Hou, 2011a). In Japan, the government will review the qualification of international accreditors if they apply for governmental recognition voluntarily.

As cross-border education continues to grow rapidly, there will be more and more international quality review activities throughout the world. Assurance that institutions can receive equal treatment and good quality services from both local and international accreditors is now becoming a common global issue.

The Role of International Quality Assurance Networks in assisting capacity building of Asian national accreditors

Given the issues surrounding the quality of international accreditation, some sending countries have endeavored to develop clear policies and strategies for foreign providers and accreditors, such as CHEA's "international Principles", which provide American accreditors with a framework for working internationally (CHEA, 2001). CHEA works with accreditors to assure that "the efforts in the international arena are handled in a careful and thoughtful manner" (CHEA, 2002, p.4). Several international and regional quality assurance organizations have been discussing international standards of quality assurance, such as the International Network of Quality Assurance Agencies in Higher Education (INQAAHE), and the Asia-Pacific Quality Network (APQN), which aim at assisting local quality assurance agencies in "determining the standards for institutions operating across national borders" and "facilitating links between accrediting bodies especially insofar as they operate across national borders" (APQN, 2010).

To assist in the self–review and international capacity building of national quality assurance agencies, INQAAHE and APQN developed good principles and practices, titled the Guidelines of Good Practice in Quality Assurance (GGP) and the Chiba Principles respectively. The INQAAHE Guidelines published in 2003 and revised in 2006 are "designed to be used by all quality assurance agencies, whatever their stage of development is". The Guidelines of Good Practice have four sections and 12 principles regarding the quality of external quality assurance, institutions and cross-border education. In the last section, it states that external quality assurance should have "policies relating to both imported and exported higher education". The standards "may be the same as those for domestic providers and domestic provision" in consultation with appropriate local agencies in the exporting or importing countries (INQAAHE, 2009). The document suggests that quality assurance agencies review their capacity for accrediting cross-border programs and institutions according to evidence such as the documents relating to quality assurance review of exported and imported education, description of meetings and visits to and from other agencies (INQAAHE, 2014).

Established in Hong Kong in 2003, APQN, supported by the World Bank and UNESCO, is aimed at "helping to build alliances between agencies, and assisting countries/territories that do not have a quality assurance agency of their own" (APQN, 2010). According to the APQN, most Asian governments have now set up quality assurance systems for two major reasons: first, to ensure the quality of the study programs offered by local institutions; and second, to enhance higher education institutions' competitiveness globally (APQN, 2010). To enhance mutual understanding and opportunities for collaboration in higher education quality assurance agencies, the Chiba Principles were officially announced in 2008 by APQN. They have three main sections–Internal Quality Assurance, Quality Assessment and Quality Assurance Agency. In this final section, external quality assurance agencies are expected to

"cooperate with other agencies and key players across national borders" (APQN, 2010). After many discussions among members, APQN conducted a survey to find out the extent which the principles were being implemented in the APQN members. The survey showed that the 'cooperation' section "should be expanded further to include ensuring the effective and relevant transfer of appropriately quality assured qualifications and the mobility of students and staff" (Stella, 2010, p.16). The report also found that English is an issue for most non-English agencies, which suffered difficulties in communication and expressing themselves fluently in English (Stella, 2010).

The guidelines of INQAAHE and APQN both addressed the importance of the internationalization of quality assurance. Some indicators of quality assurance internationalization have been developed, including cooperation with foreign agencies, building capacity for cross-border accreditation, exchange of experts and staff and information, mutual observations of each others' accreditation procedures, joining international networks, etc. These indicators will be of practical assistance for Asian quality assurance agencies in reviewing their level of internationalization.

In addition, INQAAHE and APQN launched several projects, such as internship programs, mutual recognition, and capacity building to ensure that agencies have access to quality assurance resources and use them "to enhance their operations and add to their creditability and accountability" (APQN, 2011, p. 3).

Three QA challenges in Asia: Internationalization, autonomy, and accountability

In the glonacal quality assurance system the issues of "autonomy," "internationalization," and "accountability" have been the most crucial concerns for quality assurance agencies in Asia. First, due to the fact that Asian quality assurance agencies are either governmental institutions or are affiliated with a government, it has introduced the concern for the level of autonomy that impacts national and local quality assurance agencies in Asia. Although most QA agencies including those established and funded by their governments have claimed that they have autonomy over review procedures and decisions, several scholars have expressed their concerns over the issue. Brown (2013) stated clearly that when the government develops QA initiatives as a part of higher education reform strategies, its intervention into quality assurance design becomes inevitable. Martin & Stella (2007) pointed out that "Getting the government to support the quality assurance process without losing any of the agency's autonomy or affecting its functioning is certainly an option to be considered" (p. 80). Dill (2011) also raises questions about how truly "independent, transparent, and robust" that the Asian quality assurance process actually is.

According to APQN, Southeast Asian national QA agencies are established as governmental agencies. In contrast, Eastern Asian agencies tend to be a buffer body where the government likely plays a major role in the agency. However, both types of the agencies are expected to serve government functions, particularly the use of accreditation outcomes in educational policy making and funding allocation. Therefore, a study by Hou (2012) showed that Asian QA agencies admitted that it was not easy

to maintain their level of "autonomy" because of their close affiliations with their national government.

The second challenge is international capacity building of national accreditation. The internationalization of higher education often implies the pursuit of an international image of quality and prestige in order to make the selected top institutions more globally competitive (Deem et al., 2008). This rationalizes the emergence of internationalization of quality assurance in Asia, which, taken as a symbolic and powerful indicator, is used to prove the quality standards of local institutions in a globally competitive education market (Ewell, 2008). Impelled by globalization, many Asian quality assurance agencies have begun to pay more attention to internationalization. In addition to joining international networks, they have interacted actively with foreign agencies, developed mutual recognition of review outcomes, invited international experts, set up offices of international affairs, and enriched their English-language websites. To conclude, the internationalization policies and practices in most Asian Pacific nations are lacking a quality assurance dimension, except in Australia, New Zealand, and Hong Kong, which all had the advantages of English language systems.

Finally, to credibly demonstrate accountability of the quality assurance procedures is the third challenge faced by Asian quality assurance agencies. Since quality assurance became recognized as a profession in recent years, quality assurance agencies are supposed to be "under review and development to ensure that they remain current and relevant" on the basis of a systematic scheme of quality (Woodhouse, 2010, p. 79). This is referred to as "accountability of accreditation" (Eaton, 2011). A 2011 survey targeting on seven Latin American countries by the International Network for Quality Assurance Agencies in Higher Education (INQAAHE) showed that quality assurance has both positive and negative impacts on higher education, including its influence on policy decision and processes, increase value placed on teaching as a core function of universities, leading to an increased bureaucratization and heavy administrative workload. The survey also found that most positive consequences were occurring at the program level (Lemaitre, et.al., 2011).

IQA and EQA approach by QA Agencies

In order to enhance quality of QA agencies, many QA agencies started to conduct internal and external reviews themselves. QA of QA agencies consists of internal and external QA (IQA and EQA), which indeed are so much "two sides of the same coin that the activities are inextricably interrelated" (Vroeijenstijn, 2008, 1). Several IQA approaches are generally undertaken by QA agencies, such as collecting feedback from reviewed institutions through satisfaction surveys and having formal or informal meetings, seminars and congresses with stakeholders (Marcos, 2012). Recently, some agencies have organized focus groups and conducted meta-evaluation to gather information (Marcos, 2012). Yet different tools for IQA might have their advantages and disadvantages. Take satisfaction surveys for example. Anonymous

surveys tend to be positive and do not permit more interaction with respondents. In addition, any new ideas to emerge will not likely be from the institutions. In contrast, focus groups seem to be a faster and more efficient way to gather opinions. However, it is hard to tell whether all the information they produce is accurate and unbiased, due to the limited number of participants. Hence, QA agencies have adopted multi-methods to gather feedbacks from macro and micro perspectives.

The external quality review undertaken by a third party, which might be a government, a recognition body, or an international network, is intended to recognize the quality of the agency's activities. Nowadays, "the shift from internal improvement towards external accountability seems to prevail" (Szanto, 2010, p.12) among quality assurance agencies. In fact, several quality assurance agencies began early in the 1990s to review themselves through an external review mechanism, such as the (US) Middle States Association of Schools and Colleges, Higher Education Quality Council (UK), EVC (Evalierungscentere) (Denmark), UGC, University Grants Committee (HK), GAC, German Accreditation Council (Akkreditierungsrat) (Germany), North-Central Association of Schools and Colleges (US), etc. The major reasons for the external review include the need to renew its recognition status, assisting in the development of the future plans and activities of the agency, and demonstrating that it meets the stakeholder's expectations (Szanto, 2010).

Currently, several QA networks have started to review the quality of quality assurance agencies externally. ENQA is the first organization to review all its QA agency members' status by the ESG, including QA procedures for higher education, official status, activities, resources, mission statement, independence, criteria and process, and accountability. ENQA emphasized that this external review is "independent, transparent, and robust", that is, it should be objective and provide ample evidence for the given agency's meeting (or not) the ESG and thereby the ENQA membership criteria" (Szanto, p.11).

In 2009, INQAAHE launched an external review of its members according to 12 items of the INQAAHE Guidelines of Good Practice. They include the agency's governance, resources, quality assurance, reporting of public information, relationship with institutions, standards and internal reviews for institutions, evaluation, decision, and appeals systems, collaboration with other QA agencies, and policy on cross-border higher education. Up to the present, ten quality assurance agencies have been recognized in accordance with the INQAAHE Guidelines of Good Practice. INQAAHE offers to provide an external review of an agency against the guidelines by a panel of international experts and the final report indicates specific areas in which shortcomings were observed, and makes suggestions for follow-up actions.

APQN also developed several criteria for membership review, including the nature of the operations, mission statement and objectives, staff, profile of reviewers, independence, resources, review criteria and processes, and QA. Like INQAAHE and ENQA, APQN also proposed some specific principles, called the "Chiba Principles," for QA agencies and institutions in 2008. Even so, a consensus was not reached by

all members. In 2012, supported by the Global Initiative for Quality Assurance Capacity (GIQAC), APQN conducted a pilot study on assisting its member agencies to undergo peer reviews. Sri Lanka's quality assurance agency, called the "Quality and Accreditation Council" (QAAC) under the University Grants Commission (UGC), has expressed its interest in taking the initiative against the criteria drawn from APQN's membership criteria, the Chiba principles and the INQAAHE Guidelines of Good Practice. First, QAAC was requested to come up with a self-review report, then the Peer Review Committee consisting of two reviewers from APQN members examined the operation and QA procedures of the QAAC. The final report was mainly used for QAAC's self-enhancement (APQN, 2012b).

Conclusion

Over the past decade, Asian governments have increased the size of their national tertiary education sectors through both public and private provision which has stimulated student mobility within the region. Quality assurance for students of good quality educational provision and outcomes becomes increasingly important. However, the expected and required benefits of higher education will only result if quality assurance agencies "can assist institutions raise the quality of the education they provide and can hold them accountable for their performance" (APQN, 2011, p.1).

Given this trend for cross-border growth, it is now very important for Asian national quality assurance agencies to build their international capacity by joining global networks. At this critical moment, Asian national accreditors are supposed to work together to share quality assurance staff and resources, their competitive edge will be possibly enhanced. Currently, Asian QA agencies have adopted several good strategies to enhance the quality of QA operations, such as appointing excellent evaluators, developing more effective programs on evaluator training, deepening collaboration with other QA agencies, engaging more in research activities on higher education and related issues, and even attempting to stabilize their financial bases, etc. In addition to the good practices already in place, they aggressively develop their international capacity through taking part in the QA regional and global networks in order to build trust among institutions, governments and the public. It can be foreseen that demands for cyclical internal and external review to ensure the accountability of the QA agencies will get stronger. It is likely that the development of a systematic QA mechanism by Asian QA agencies can be anticipated in the near future. As David Woodhouse, former president of INQAAHE, has said,

> *"Quality assurance agencies need to work at their own quality assurance, just as they expect their institutions to do. As educational institutions are constantly being exhorted to exhibit continuous quality improvement, and we quality agencies must do the same."* (2007, p. 7-8).

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ASEAN Quality Assurance Framework in Higher Education

Prof. Zita Mohd Fahmi

• Executive Secretary, ASEAN Quality Assurance Network
• Deputy Chief Executive Officer (Quality Assurance), Malaysian Qualifications Agency, Malaysia

She has extensive knowledge and skills in standard settings, building evaluation instruments, procedures, processing applications, establishing qualifications framework and quality assurance policy matters. Currently, she is playing a pivotal role engaging in the development of the ASEAN Quality Assurance Framework.

Abstract

Many of the ASEAN external quality assurance systems were naturally designed to reflect the national higher structures and systems of their respective countries, with mandates, functions, and differences in sector coverage, quality assurance practices and procedures. By practice quality is the basic premise for recognition of qualifications. It generally facilitates recognition of qualifications specific authorities nationally and across borders in the increasing global mobility of student and workers. Lesson learnt from Europe, showed that higher education harmonization supports regionalization and expedites integration and mobility. ASEAN agenda for a single economic community among many integration strategies and plans, considered the importance of harmonization of higher education to support mobility of students and high skill workers. It is also an important theme in the Free Trade Agreement between ASEAN and her trade/dialogue partners. The ASEAN Ministers of Education in 2008 and SEAMEO RIHED recognized that EQA bodies share major responsibility towards establishing ASEAN Higher Education Area with a focus on harmonization of the HE systems for regional integration and the ASEAN Economic Community. This led to the formation of the ASEAN Quality Assurance Network (AQAN), which, amongst others, in 2011, was tasked to develop the ASEAN Quality Assurance in Higher Education

(AQAFHE) and engaged in QA capacity building programs. The AQAFHE provides a set of principles of agreed good practices in 4 quadrants: (1) the external quality assurance bodies, (2) the quality policies, standards, processes, (3) the principles expected for institutional internal quality systems and (4) for an appropriate qualifications framework. Many ASEAN countries already have or will have a national qualifications framework in the near future and it needs to be harmonised. The National Qualifications Framework provides value information of the qualifications awarded in each system and is generally underpinned by a quality assurance system. It is expected that AQAFHE must complement the development of the ASEAN Qualifications Reference Framework (AQRF), a project supported under the Economic Cooperation Working Group of the AANZ-FTA in 2010. The regional framework is expected to provide better system-wide and neutral connectivity between national systems and with AQAFHE role in addressing the need for a harmonized quality assurance systems in the region laying the foundation for "zone of trust" for qualification comparability and community mobility. The Harmonisation train has left the station. Are we on board?

Keywords: external quality assurance; ASEAN Economic Community harmonization of higher education, recognition; mobility; regional quality assurance framework; regional qualifications framework

ICQA2014, BANGKOK, THAILAND
8-9 DECEMBER 2014

ASEAN QUALITY ASSURANCE FRAMEWORK FOR HIGHER EDUCATION" (AQAFHE)

AQAN
ASEAN Quality Assurance Network

Zita Mohd Fahmi
Secretary, ASEAN Quality Assurance Network
Malaysian Qualifications Agency

ASEAN Agenda

- **ASEAN** "transform ASEAN into a single market and product base, a highly integrated economic region, a region of equitable economic development, a region fully integrated in the global economy"
- **ASEAN Integration 3 pillars –**
  - Political - Security
  - Economic Community
  - Social – Cultural

- Economic Community – free flow of goods, skilled workers, services and investment
- Importance of human capital development

Points

- Trends
- ASEAN Agenda
- Role of External Quality Assurance Body in ASEAN Agenda
  - agencies in ASEAN
  - Differences in QA approaches
- AQAFHE –roadmap
- AQRF
- Challenges

ASEAN Agenda

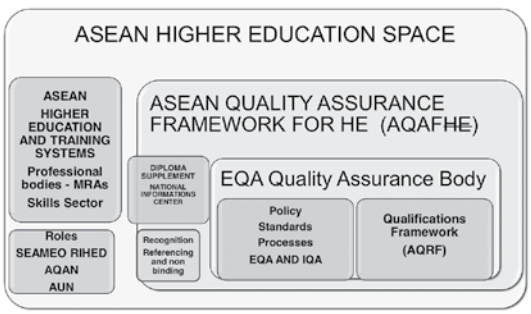
- **2008 ASEAN Ministers of Education** "The Structured Framework for Regional Integration in HE in SEA: the Road towards a common space"
- Importance of HE for quality workforce to support all ASEAN strategies
- Quality assurance provides basis for confidence
- Lessons learnt from others -international bodies and regional efforts

Trends

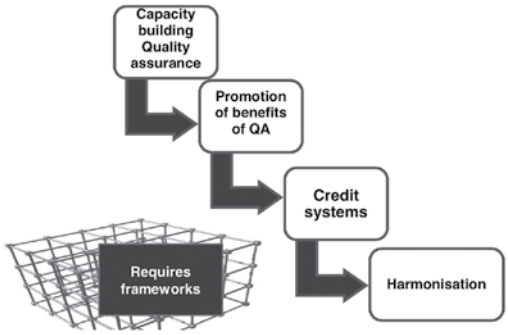
- Education - political, economic and social development
- State quality concerns in higher education
- Growth of quality assurance systems
- Increasing interconnectedness, increasingly Interdependence
  - Learner and workers mobility
  - Cross border exchanges
  - Global connectivity
- Growth of regionalism - **ASEAN**

pzv 6

ASEAN Higher Education Common Space – Responsible parties and Quality Assurance Framework



Quality assurance supports harmonisation



ASEAN Quality Assurance Network (AQAN) to support ASEAN Initiatives

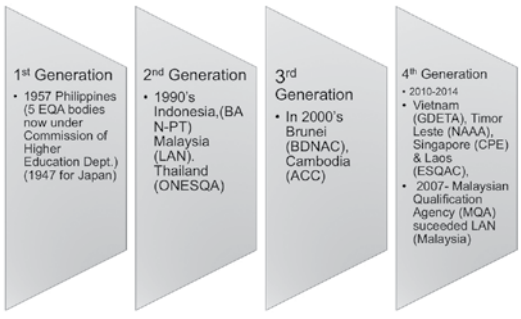
ASEAN Minister of Education Meeting Establish 2008 – The Roadmap to ASEAN Higher Education Area 10 national QA members	**AQAN will promote on the benefits, capacity building & the development of the QA harmonisation in Southeast Asian countries**	AQAN registered in Malaysia Applying for ASEAN affiliation
ASEAN Quality Assurance Framework for HE (AQAF~~HE~~) AQAN	ASEAN Qualifications Reference Framework Quality premise Zone of trust	Supports ASEAN Integration, harmonisation of HE/TVET systems Student & Skilled Workers Mobility – Services

Establishment of EQAs in ASEAN

External Quality Assurance Bodies in SEA - "same-same but different"

Mandate & policies
Vehicle and instrument for **Q** change, control and transformation of higher education systems
Source of authority /independence
Governance/representations of stakeholders
Higher education structures
Mandatory or voluntary accreditation/audit (voluntary compliance)
Education sectors coverage
QA approaches & similar -terminologies
Responsibilties for NQF

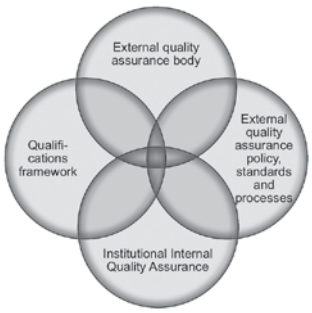
External Quality Assurance in ASEAN



Highlights – AQAF~~HE~~ – purpose and characteristics

- AQAF~~HE~~ consists of 4 thematic interrelated principles
- It is intended to serve as a common reference point for alignment by the quality assurance bodies, qualifications and higher education institutions
- Improves consistency of quality assurance practices, provides clarity and builds a confidence structure to facilitate the recognition of qualifications
- Strives towards harmonisation amidst the rich diversity within ASEAN countries

AQAFHE - 4 interconnected quadrants- Principles of Good Practices



3rd. Institutional QA Principles

- Institutional responsibility for quality assurance programmes and other academic activities
  - Internal QA systems / processes
  - Generally reflects EQA's QA standards
  - Self-assessment culture
  - Stakeholders involvement
  - Performance indicators

Findings
- Strength quality systems varies across institutions
- Generally reflects EQA requirements
- Capacity building projects

1st External Quality Assurance Body

- Appropriately established
- Competent body
- Functions
- Policies
- Resources
- Independence
- Information center

EQA bodies - differences (developing, established or undergoing a restructuring)
- ✓Brunei:BDNAC
- ✓Cambodia:ACC
- ✓Indonesia:NAAHE
- ✓Laos:ESQAC
- ✓Malaysia:MQA
- ✓Philippines:CHED
- ✓Singapore:CPE
- ✓Thailand:ONESQA
- ✓Timor Leste:ANAAA
- ✓Vietnam:GDETA
- Myanmar- (developing)

4th Qualifications Framework

- **Principles:** generic guides that pertain to the characteristics of a national qualifications framework or its sub systems
- **Underpinned by National QA systems- Zone of Trust**
- **Information Systems**
- Key elements
  - Levels (8)
  - Learning outcomes
  - Credits and student learning time
  - Learner-centered

- Malaysian Qualifications Framework
- Thai National Qualifications Framework
- Indonesian Qualifications Framework
- Philippines Qualifications Framework
- Brunei D National Qualifications Framework
- Cambodian Qualifications Framework
- Vietnam National Qualifications Framework
- Singapore (Workforce Skills Competency Framework)
- Laos (in progress)
- Myanmar (planning)

ASEAN Qualifications Reference Framework

2nd. EQA – Policies, Standards and Processes

- QA Principles
- Accreditation assessment, and audit
- Programme-based or institutional-based
- QA standards and applications –criteria
- Generic to specifics standards
- NQF related matters
- Quantitative and qualitative assessments

- Different levels of implementation
- Highly similar statements of standards
- Good practices
- Differences in approach
- Capacity development
- National needs

ASEAN Qualifications Reference Framework (AQRF)

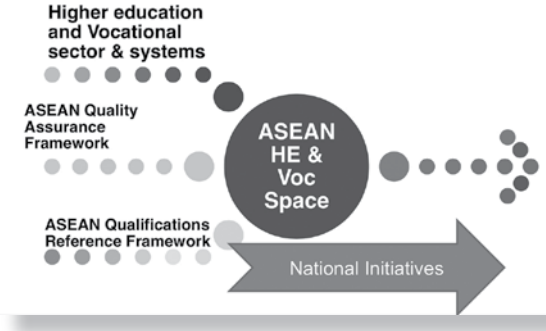
AANZFTA Economic Cooperation Project 2010 to 2014
Endorsed in principle by ASEAN Ministers of Education and Trade

- A Trade matter
- AEC – Mutual recognition & Core competencies for trade and occupations
- A translation device-comparison, transparency and high quality qualifications systems
- Key objectives
  - Improve the quality of education and training
  - Support recognition of qualifications
  - Encourage development of NQFs
  - Validate non-conventional learning
  - Promote lifelong learning
  - Promote workers /student mobility

Cont. ASEAN Qualifications Reference Framework (AQRF)

- 8 Levels
- Notion of competence- cognitive competence, functional competence, personality competence and ethical competence
- Learning Outcomes- reduced to 2 domains-
  - Knowledge and skills (K/S)
  - Application and responsibility (use of K/S in practice , level of independence , decision making & responsibility)
- Expand further by economic sectors
- Must be underpinned by acceptable quality assurance system
  - **AQAFHE/INQAAHE GGPs/Chiba Principles/ESG?**

A Roadmap towards harmonisation for HE & Voc. Area



A related matter - An ASEAN Credit Transfer System?

- To support student mobility within ASEAN (Asian International Mobility of Students programme-AIMS), ASEAN + 3 (China, Japan & Korea), ASEAN-Europe, East Asia Summit, Australia/New Zealand & others
- Challenges
  - Various works –AUN-ACTS, UMAP-CTS, SEAMEO RIHED (ACFTA) -ECTS
  - National Qualifications Framework Credits systems differ
  - Findings – Quantitative values- 1 credit = 38-48 notional learning hours
  - Transfer of learning achievements – volume of learning outcomes quantified by credits

Thank You, terima kasih

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Many more initiatives and challenges

- ✓ An ASEAN governance structure, supporting systems and mechanisms
- ✓ A common roadmap-2015-2018 for AQAFHE and AQRF?
- ✓ Applicability of AQFHE/AQRF for HE and TVET sectors
- ✓ ASEAN Learning Outcomes descriptors and Core competencies /Occupational related ???
- ✓ National systems to address internal development and regional commitments-capacity and referencing?
- ✓ All stakeholders- HEIs, TVET providers, Industries / employers

Quality Achievement through Assessment, Testing and Training

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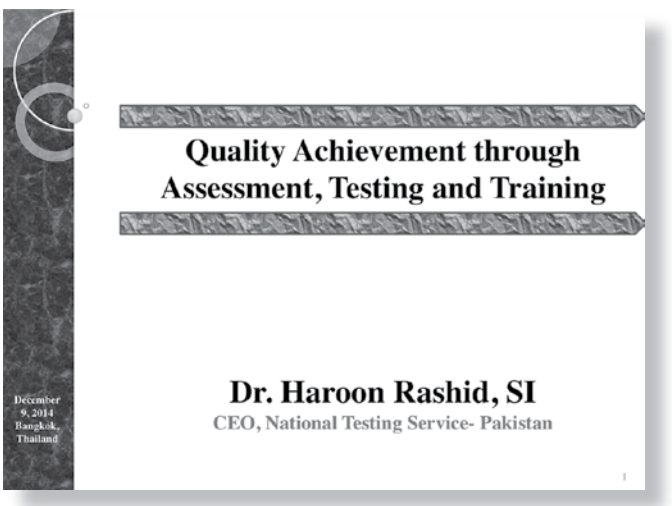
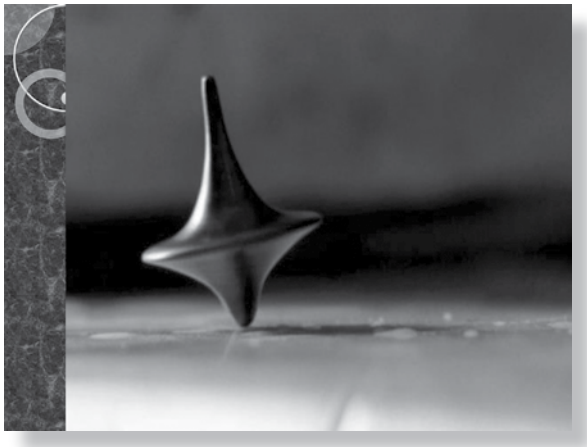
Abstract

Viewing a thin line, yet a gulf difference, between rhetoric and reality of quality achievement at institutes of higher learning at global, regional (South Asia), and national (Pakistan) levels, the higher education landscape seeks to identify, and then face up to the challenges of quality achievement. Better said, quality achievement not only dwells within the boundaries of educational institutes, but it also mirrors the school to work process. Building on the above, the presentation aims to highlight the role of a robust mechanism of assessment, testing and training in the quality achievement equation. The presentation is set up in two phases. In the first phase, the following question will be answered: What are the challenges to quality achievement at educational institutes? In so doing, certain challenges, such as political conditions, financial and resource constraints, cultural nuances, etc., will be discussed. The second phase will answer the question: How the robust mechanism of assessment, testing and training in the quality achievement may help adequately facing up to the challenges? Solutions will be suggested by using a case study approach i.e., National Testing Services – Pakistan (NTS).

Keywords: Quality Achievement, Assessment, Testing, Training, Higher Education





Why Higher Education in a global perspective is important to take care of?

5

Quality Achievement

Why the Focus is on Higher Education?

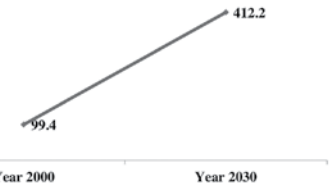
In the future, what would be the demand for Higher Education, internationally?

3

314 %

increase in global enrolment in Higher Education

Global Enrolment in Higher Education (Million)



According to the 30-year forecast (2000 - 2030) the increase in the enrolment in higher education would be 314% (99.4 to 414.2 million). (UNESCO Institute of Statistics, 2012)

6

Higher Education in times to come…

What the future of higher education (internationally) is going to be?

4

Higher Education in South Asia

•
•
•

The emerging market

Significance to South Asian region, especially with regard to Higher Education.

1/4

One-fourth of the world's population lives in South Asia.

In **2000**, South Asia had **12 million** enrolments – (12% globally)

By **2035** it will have about **125 million** enrolments (24% globally)

India will remain as the world's **second** in enrolments.

Pakistan is expected to be in the world's **top 20**.

Part 1

- What are the challenges to quality achievement at educational institutes?

Part 2

- How the robust mechanism of assessment, testing and training in the quality achievement may help adequately face up to the challenges?

Tertiary Level Education Increased **3% to 10%** from 2009 to 2012

Fifteen Accreditation institutions for quality assurance are operating in Pakistan

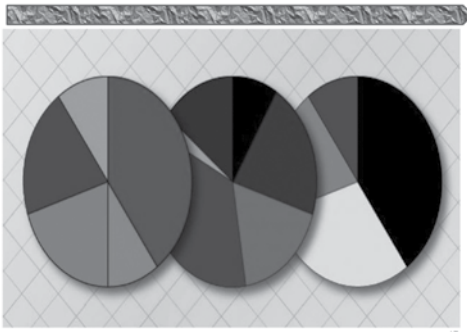
By **2035, Pakistan** is expected to be in the world's **top 20**.

Part 1

- What are the challenges to quality achievement at educational institutes?

Challenges to Quality Achievement at Institutes of Higher Learning

14



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Rhetoric Vs Reality

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- **Is university ranking a symbol of quality?**
- Many educators question the value of rankings and argue that they can measure only a narrow slice of what quality higher education is about.
- Simon Marginson (professor of higher education at the University of Melbourne), says that "It's a very successful business model but I do think social science wise it's so weak that you can't take the results seriously."
- Greater reliance on reputational surveys than other rankers
- a university's teaching and research reputation, as gauged by an invitation-only survey of academics
- Relying citations and publications and the numbers of alumni and faculty winning Nobel Prizes and Fields Medals

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Rhetoric

Quality Certifications

Documentation

League Tables (Ranking)

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Reality

McKinsey Global Institute (2005)

28 low wage nations (including India and Pakistan)

33 million young professionals in engineering, finance and accounting

Only a fraction get a job in foreign companies

Reason is poor quality

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- Example – In 2005, the McKinsey Global Institute conducted a study of the emerging global labor market and concluded 28 low wage nations, (including India and Pakistan), have about 33 million young professional in engineering, finance and accounting, but "only a fraction of potential job candidates could successfully work at a foreign company," the study found, pointing to many explanations, but mainly poor quality of education (Haq, 2009).

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Part 2

How the robust mechanism of assessment, testing and training in the quality achievement may help adequately face up to the challenges?

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Face up to Challenges to Quality Achievement

23

Role of Assessment, Testing, and Training towards Quality Achievement

24

A case of

NTS™

25

About NTS - Pakistan…

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Access

- **Academic and Social Responsibility Initiative (ASRI)**
- **Underprivileged and deserving students among NTS beneficiaries**
- **NTS envisions (by 2020):**
  - Construction of NTS Center and availability of 07 MTC (Model Test Centers) to conduct tests and Training,
  - Partnership enhancement to 1,000 organizations and institutions within Pakistan,
  - Networking & information sharing all over Pakistan,
  - NTS Support Pool enhanced to 150 cities in Pakistan,
  - Enhancement of capability to conduct paper-based test for 1 million candidates in 150 cities and computer based test facility in 100 cities of Pakistan simultaneously, with a provision of 20 more cities,
  - 1,000 institutions as test centers on NTS panel.

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Academic and Social Responsibility

NTS believes that its core objectives can only be achieved, when partner institutions, academia and the community are engaged actively in endeavours which help efforts in improving quality of education.

NTS therefore has designed Academic and Social Responsibility Initiative (ASRI) that has been initiated to support institutions, academia and individuals to focus and address such issues that can make Pakistan a developed economy.

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Other Goals under the Vision-2020 are:

- Test Item Contributors will be increased up to 5,000,
- Construction of NTS Center and availability of 07 MTC to conduct tests and Training,
- Training of 10,000 staff and partners in various disciplines and skills,
- Partnership enhancement to 1,000 organizations and institutions within Pakistan,
- Networking & information sharing all over Pakistan,
- NTS Support Pool enhanced to 150 Cities of Pakistan,
- Enhancement of capability to conduct paper-based test for 1 million candidates in 150 cities and computer based test facility in 100 cities of Pakistan simultaneously, with a provision of 20 more cities,
- Data entry processing capacity enhancement to 100,000 application forms per day,
- 1,000 institutions as test centers on NTS panel,
- Setting-up of Data Center,
- Improved security and secrecy due to highly secured Printing Press and Copyrights of contents, use of information & knowledge for planning & action programs,
- Research and advocate to educational institutions and policy makers for formalization of quality education and assessment policies in the country.

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Technological Developments

E-marking

NTS envisions (by 2020):

- Enhancement of capability to conduct paper-based test for million candidates in 150 cities and computer based test facility in 100 cities of Pakistan simultaneously, with a provision of 20 more cities,
- Data entry processing capacity enhancement to 100,000 application forms per day,
- 1,000 institutions as test centers on NTS panel,
- Setting-up of Data Center.

30

E-marking: NTS uses e-marking software for swift marking system and OMR technology. This system automates e-marking of forms (Answer Sheets) and helps efforts to reduce testing, assessment and marking time considerably.

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Equity

NTS plans to conduct:

- Assessments from Grade-5 to Professional Career
- Tests for Physically Challenged People

NTS envisions (by 2020):

- Improved security and secrecy due to highly secured Printing Press and Copyrights of contents, use of information & knowledge for planning & action programs.

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Funding

NTS's Cost effective testing system

NTS aims to:

- extend scholarships
- support organizations programs, meetings, conference including international etc.
- support NTS Employees Welfare Fund

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NTS's Cost effective testing system enables interested individuals to take tests in their respective cities. NTS has a nationwide network with offices in all major cities of Pakistan that is capable of conducting tests all over the country. Some key features of the NTS network and capacities are as follows:

- The headquarters (Secretariat) is located in Islamabad with five regional offices in Karachi, Lahore, Quetta, Peshawar and Abbottabad. These offices are responsible for carrying out the entire business independently.
- NTS has 250 full time employees whereas the NTS Support Pool has a facility (with about 10,000 highly trained personnel for test administration and invigilation) to meet the growing challenges of testing and assessment in the country.

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- NTS is capable of conducting paper-based test for 300,000 candidates in 60 cities and computer-based (online) tests in 29 cities (could be extended to 36 cities) in Pakistan simultaneously.
- Capable of processing about 100,000 application forms per day.
- About 350 institutions are on the NTS panel as test centers.
- NTS has different subject panels with more than 2,457 test item contributors from prestigious universities and reputed professional organizations in Pakistan.

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Qualified Manpower

- **National Teachers Database (NTD)**
- **National Institute of Educational Testing and Assessment (NIETA)**

National Teachers Database (NTD): The aim of NTD is to fulfill the needs of educational institutions by conducting a standardized recruitment test for potential and existing faculties that engage in teaching to primary and secondary level classes. The NTD associates are also provided free access to the database for a selection of suitable candidates. NTD Test Score is valid for Two Years.

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National Institute of Educational Testing and Assessment (NIETA)

- NTS is establishing an international standard National Institute of Educational Testing and Assessment (NIETA). The overall purpose is to acquaint teaching faculties (primary to professional level) of public and private sector educational institutions including universities with students' testing and assessment techniques, with an emphasis to:
  - Test and assessment paper development techniques in a specified subject;
  - Enable with knowledge, skills and techniques of efficient paper marking;
  - Establish Pupil Monitoring System (PMS) in selected institutions in Pakistan; and
  - Research and Development (in testing and assessment).
- The institute will offer various kinds of training courses that span over a week to six months diploma. The Institute will be affiliated with COMSATS Institute of Information Technology (CIIT) and Cito B.V Netherlands.

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Capacity Building

ELTeach

Human Resource Development (HRD)

- NTS contributes to acquainting faculty members with pre-steps in student's evaluation and techniques of effective test item construction and paper marking.

NTS organized training workshops in different districts and trained 155 master trainers from 71 universities of public and private sector.

NTS organized training workshops at:

- Directorate of Staff Development (DSD)
- Government of Punjab Lahore wherein 35 trainees (ToT) from DSD
- Punjab Education Commission (PEC)
- Punjab Educational Assessment System (PEAS)
- Punjab Education Foundation and Punjab Text Book Board (PTBB) etc.

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ELTeach

NTS is also In Country Partner (ICP) of Cengage Learning-USA/National Geographic Learning and offers ELTeach, an online training, assessment and certificate program that provides professional development for English language teachers (ELT) worldwide. The aim is to improve the quality and consistency of English language teaching across an entire country. The program comprises two courses — English-for-Teaching and Professional Knowledge for ELT.

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Capacity Building

NTS also contributes in Human Resource Development (HRD) by organizing training and capacity building workshops. Realizing the fact that Pakistan does not have a proper institute or facility to impart training on an internationally recognized and standardized testing / examination paper construction and marking techniques, NTS in collaboration with HEC has designed a series of workshops for teaching faculties of public and private sector educational institutions including universities and Higher Education Institutions (HEI) of the country. The objective of the program is to acquaint faculty members with pre-steps in student's evaluation and techniques of effective test item construction and paper marking.

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Private Sector

Consulting Services

NTS professionals offer consulting services, Teachers' Training, Capacity Building, technical assistance and other solutions for institutions, private and corporate business and government organizations throughout Pakistan. Therefore, NTS can meet partners' needs in the following ways:

- Measuring Knowledge Base and Skill Levels;
- Establishing Performance Ranking;
- Action-oriented research, analysis and training;
- Strategic planning and Baseline surveys; and
- Documentation/reporting.

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Relevance of Curriculum

Test Item Bank and the Curriculum

- NTS Test Item Bank contains more than 384,000 test items in about 65 well-known disciplines of Engineering, IT, Medicine, Management, Natural and Social Sciences.
- NTS engages eminent scholars, educationists, technical experts, subject specialists and faculty members from R&D. organizations/Universities of good repute of the country who ensure quality in content development (Test Items).
- Each test item is peer reviewed by educationists, psychometrician, HEC experts, supervisors for PhD and Productive Scientists.
- The work is done by four committees: Academic Committee, Peer Review Committee, Subject Committee , and MCQ Contributors Committee.

NTS envisions (by 2020):

- Improved security and secrecy due to highly secured Printing Press and Copyrights of contents, use of information & knowledge for planning & action programs.

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Academic Committee consists of eminent university professors responsible for developing the curricula, along with regulating and promoting consistent testing.

Peer Review Committee consists of eminent university professors solely responsible for quality assurance of test contents and MCQ's.

Subject Committee lays down proper standards of curriculum, so as to regulate and promote the standards for testing in a specific subject: numerous MCQ developers also work under this committee.

MCQ Contributors Committee consists of educational experts from primary to professional level faculty members, including from colleges and universities, helps in building authentic Test Item bank.

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Employability

Medical Representatives Certification (MRC):

Graduate Employment Examination (GEE) Comprising GAT-Subject and TOEIC®:

LAW-GAT

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Internationalization

NTS-ETS Collaboration Program
Products Sales Report
1st July 2011 – 30th June 2014

Sr. #	Product	Test Sold (No.)
1	TOEIC (S&W)	2,287
2	TOEIC (L&R)	12,176
3	TOEIC S	11,770
4	TOEIC W	27
5	TOEFL (ITP)	807
	Total	**27,057**

Medical Representatives Certification (MRC): NTS in collaboration with Pakistan Pharmaceutical Manufacturers Association (PPMA) and Pharma Bureau has initiated a MRC Program for professional development and quality enhancement of the medical representatives.

The aim is to provide valuable services to the pharmaceutical industry. The test measure the minimum acceptable technical knowledge, professional selling skills and good business practices in the sales / marketing professionals.

Graduate Employment Examination (GEE) Comprising GAT-Subject and TOEIC®: An English Proficiency Test by NTS for organizational communication bundled with GAT-Subject is offered to all graduates, potential job applicants and for use by employers in Pakistan, both in the public and private sectors.

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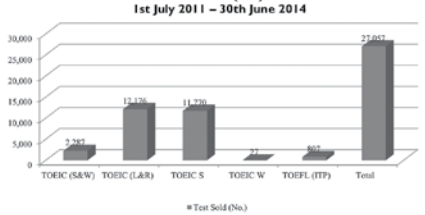
Internationalization cont.

NTS-ETS Collaboration Program
Test Sold (No.)
1st July 2011 – 30th June 2014



LAW-GAT

Under the Pakistan Legal Practitioners & Bar Councils Rules, 1976 a law graduate desirous of seeking enrolment as an Advocate to practice law, is required to pass an Assessment Test, for being eligible to apply to a Bar Council for that purpose. The Pakistan Bar Council (PBC) has assigned NTS the responsibility to administer the Law Graduate Assessment Test (LAW-GAT). Persons having passed LL.B (final year) examination from a University that is recognized by the Pakistan Bar Council, with a minimum seventeen years of education, are eligible to apply for LAW-GAT

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Internationalization cont.

New EPA (ETS Preferred Associates) Award - 2011-2012

International Networking and Collaboration

- Member of the International Association for Educational Assessment (IAEA) USA.
- Only ETS Preferred Associate (EPA) of ETS-USA in Pakistan
- Partnership with Cengage Learning/National Geographic Learning(NGL) as CIP
- MOU signed with Cito, B.V., Netherlands
- Member Association of Test Publishers (ATP) – The US-based
- Institutional member ASCD-USA
- Member Asia Pacific Quality Network (APQN) based in Shanghai, China
- Developed linkages with the Office for National Education Standards and Quality Assessment (Public Organization) of Thailand (ONESQA)
- Developed linkages with Taiwan Assessment and Evaluation Association (TWAEA)
- An ISO 9001-2008 certified organization.

One for Nine: Corporate Social Responsibility

Mr. Tony McAleavy
Research and Development Director, CfBT Education Trust

Abstract

This paper provides an international perspective on the One for Nine project. My organisation, CfBT Education Trust has supported One for Nine as an act of Corporate Social Responsibility. What are the benefits for us? The paper gives a case study of the One for Nine workshops that we sponsored this year in Thailand using British education experts from our organisation. These experts delivered workshops that were very well received by Thai colleagues. In addition, the British experts gained much themselves from the experience. In the paper we explore the idea of One for Nine as a '2 way street' that brings opportunities for learning both for the expert One as well as the participating Nine. The paper also provides information about a British project which has some philosophical similarities to One for Nine. This project was known as London Challenge and was an attempt to improve education in low performing government schools in London by twinning these schools with high performing schools. The results were extremely encouraging in terms of improved test scores and school inspection grades. This suggests that projects such as London Challenge and One for Nine can make a real difference to educational outcomes.

Introduction

This paper presents an international perspective on the One for Nine project. It consists of two parts:

- Some reflections on the involvement of my organization in the One for Nine scheme in 2014. In particular this paper discusses the experience of some British experts who participated in the project. The British educationalists to gether formed a One within the framework of the One for Nine relationship. As such they were able to share some of their expertise.
- A discussion of a British approach to school improvement that is very similar to One for Nine. In London since 2003 there has been a programme of school improvement based on a relationship between some 'outstanding' schools and some schools considered to have serious weaknesses according to the national schools inspectorate.

The context for these comments is the work of CfBT Education Trust. We are a UK-based international education company. We provide education services to

governments and private schools all over the world, with a particular focus on school improvement in the UK, Africa, the Middle East, India and South East Asia. We are a not-for-profit company. We work in a commercial way but we use our surplus to fund a programme of public research. Our research specialises in the field of school improvement. The London case study derives from our research.

PART 1: INVOLVEMENT WITH ONE FOR NINE

Our history of collaboration with ONESQA

We are very proud of our longstanding partnership with ONESQA and the government of Thailand. CfBT Education Trust provides accreditation to private international schools in Thailand. I tell people all over the world about this work because I think the model is so good. We provide international experts who evaluate school quality using international norms. Our colleagues are joined by staff provided by ONESQA who specialise in the quality of the teaching in the important area of Thai language and culture. This team-work is very successful. It illustrates an important point that is relevant in the context of One for Nine: namely that *'we learn better when we work together'.*

British involvement in One for Nine

CfBT has been supporting One for Nine. In April 2014 we organised a trip to Thailand for a group of expert British teachers. These are people who are well known for the quality of their work in British schools. The British experts ran school improvement workshops in Bangkok and Chiang Mai as part of the One for Nine programme. At the very beginning of the workshops the principles of One for Nine were clearly stated by Associate Professor Chanthana Chaichit, former Chairperson, Committee for Development of Assessment System for Basic Education, ONESQA. The British experts were able learn about One for Nine activities by representatives of five educational institutions from the first phase of One for Nine. The British representatives were informed about the progress of this initial cycle.

The focus of the One for Nine workshops

The British experts ran workshops for representatives from Thai schools with a focus on important school improvement topics:

- Effective classroom pedagogy;
- Practitioner research;
- Perspectives on the teaching foreign languages;
- School self evaluation as a mechanism for school improvement.

For each topic, British experts presented approaches based on current best practice found in the highest performing schools in England. The presenters themselves were themselves practitioners with a reputation for the excellence of their work in England.

The British experts worked with teachers and also with staff from ONESQA. There

was an opportunity not just to discuss methods from England but also to discuss and consider Thai methods, including the ONESQA system for quality assurance and the assumptions about school excellence found in the new ONESQA Framework for school review. The British experts also had an opportunity to visit some Thai educational institutions. We were delighted that Dr Channarong found the time to provide hospitality for the British experts.

The Thai colleagues were very positive about the input from the British experts. They expressed great interest in the technical issues that were highlighted by the British speakers. The feedback regarding the quality of the presentations from the British colleagues was extremely good. The sessions were highly interactive and not done in a simple lecture mode. Thai colleagues engaged in a lively dialogue about these questions as part of the One for Nine workshops.

The One for Nine orientation towards action

The British experts were impressed by the extent to which the One for Nine workshops emphasised not just talk but also action. One impressive feature of the workshops was the way that the Thai colleagues reflected, in a very practical way, on what they should do as a result of the discussions. At the end of the workshops each delegate explained how he or she intended to put into place an action plan based on what had been learned during the session. This orientation towards action should surely be an important test of the success of any One for Nine project. As a philosopher once said, "It is not enough to understand the world we must also change the world". Of course knowledge is a precondition for the kind of action that will change the world for the better. So One for Nine should involve the transfer of knowledge leading to plans for action.

What the British experts learned from involvement in One for Nine

After they had returned to England, we asked the British experts to reflect on their visit to Thailand and their involvement in One for Nine. They all applauded the nature of the One for Nine scheme. In every case they wanted to emphasise that although they were officially labelled as 'experts', they also saw themselves as learners during the visit. This is an important point for the future development of One for Nine. The One- the person or institution who freely gives expertise will also receive much back in return from the Nine. There is wisdom in the Nine as well as in the One. It is as they say a 2 way street and not a one way street: the traffic of learning and benefit goes both ways. And the giver is a receiver, just as the receiver is a giver. One for Nine does not need to be based on a simple transmission model where the wisdom of the giver is simply handed over to the receiver with nothing in return. In the case of the British CfBT visitors, they, of course received back the wonderful kindness and excellent hospitality for which Thai people are famous all over the world. They received the great benefit of spending time in another culture. They also acquired new professional knowledge to help their work as educators.

Five key principles

The British experts received much in terms of enriched educational thinking. Several key principles or learning points emerged from the experience of the British experts:

1. Material resources in school are useful but they do not by themselves make schools into excellent schools;
2. Partnership and collaboration between schools is important and there are dangers if schools become too isolated and too competitive with each other;
3. The potential for quality assurance to be an engine for change and improvement;
4. The need for schools to promote moral education as well as academic achievement, and
5. Opportunities for schools to link well with their local communities and with the network of 'alumni' or former students.

Material resources are useful not enough

The British visitors discovered that there was a difference between the level of resources and money available for Thai schools compared with British schools. They had the opportunity to visit Thai institutions and one teacher was surprised to see that there was student-teacher ratio of over 40:1 in a school. This is much greater than the situation in a British school where a typical ratio is 25:1. Similarly many British schools have more money to spend on buildings, playing fields, books and computers. While these resources are helpful there is no simple relationship between the level of material resources and the quality of the teaching and learning that takes place in a school.

The importance of partnership

The British visitors saw One for Nine as a demonstration of the power of partnership as a mechanism for improvement. It is easy for teachers in an individual school to be isolated and One for Nine was a good expression of the idea that schools must work together. In England over the last 20 years there has been considerable competition between schools. For example, there is a level of competition between schools for the enrolment of students. In urban areas parents can send their children to any school they choose and this makes the schools very competitive. One for Nine was a reminder to the British experts that although competition has some benefits, there are also disadvantages because it can discourage the sharing of knowledge from school to school.

Quality assurance as an engine for improvement

The role of ONESQA within the Thai education system was of great interest to the British experts. In a good education system quality assurance will go beyond checking or accrediting an acceptable level of quality and will also constitute a mechanism for improving quality. The British visitors were struck by how far the Thai quality assurance system was orientated towards change and improvement, and was not simply a form of policing, checking and measurement. The development of the new school review framework had been used by ONESQA as the basis for a professional dialogue about expectations. In the experience of the experts the use of quality assurance systems as a stimulus for a rich professional conversation about excellence is unusual in international terms and highly impressive. It was clear to the experts that much of the drive and energy for the imaginative use of quality assurance derived from the leadership provided by Dr Channarong.

The emphasis on moral education

Perhaps the single most striking difference between Thai and British schools is in the arena of moral education. The British experts were particularly impressed by the way the Thai schools and the education system in Thailand emphasises the importance of moral development as well as academic or cognitive outcomes. In England there has long been a recognition that school education is about helping learners to grow both in terms of cognitive outcomes and in terms of moral development. There was an Act of Parliament as long ago as 1944 that required all schools to promote the social, moral, spiritual and cultural development of school students. While there is a tradition of seeing a school as a place where children learn to be good people as well as capable people, this aspect of the curriculum is not so well developed in England. There is much debate about this matter right now. Many people in England say that our schools should put much greater emphasis on moral and personal development. There is much talk at the moment about the need for what people call 'character education'. The British experts that visited as part of the One for 9 project were particularly impressed by the Thai approach to character education. They told us when they got back to England how struck they were by the Thai emphasis on moral education. This commitment to offer support for moral education was reflected both in the ONESQA methodology and in the comments of teachers who took part in the workshops.

Here are some comments from the British teachers that describe how impressed they were by the Thai approach to moral education.

> "I think how we benefited was in seeing the spiritual, moral, social and cultural work that the Thai schools focus on. I think we often, in Britain, focus on teaching being about students achieving the grades but it should be about more than that. The Thai colleagues also had a as a priority creating good citizens and I think we can learn a lot from them."

Links with the local communities and school alumni

One feature of the work of Thai schools that the British experts commented upon was the strength of the community spirit. They were interested to hear about the way the local community supported the schools and the extent to which the schools were seen as major community resources. In Thailand, there seems to be more of a tradition of keeping in contact with former students or alumni. In England, universities are good at maintaining a continuing relationship with alumni, and alumni support the work of the university in many ways. There is much less of this alumni tradition at the level of government primary and secondary schools. The British experts concluded that schools in England could benefit from this approach.

PART 2: A BRITISH APPROACH SIMILAR TO ONE FOR NINE

The London Challenge

In the year 2000, the government schools of inner London were the worst performing schools in England. Today London schools outperform all other schools in England in terms of test scores and inspection grades. How did this change come about? Central to the transformation was a school improvement programme called London Challenge, which had some similarities to One for Nine. London Challenge involved a twinning relationship between the low performing schools and high performing schools in the city. The best schools in the city were designated as Teaching Schools. They were expected to provide professional development for weaker schools. The heads of the Teaching Schools were given the designation as National Leaders of Education. As National Leaders of Education these headteachers received no extra pay but they did receive a high level of recognition for their own excellent practice and the title-National Leader of Education-appealed to their sense of patriotic duty. These headteachers as National Leaders of Education provided coaching support to the headteachers of the low performing schools. Classroom teachers from weaker schools had access to two pedagogical improvement programmes (the Outstanding Teacher Programme' and the Improving Teacher Programme) which was provided by the Teaching Schools. The support from the high performing schools was organised by an adviser provided by the London Challenge project. These advisers also provided training and quality assurance for the work of the staff of the Teaching Schools.

Assisting school-to-school support

CfBT has researched the impact of London Challenge. The main report detailing our findings is found in Baars et al (2014). We spoke to the key individuals who managed the development of networks of school-to-school support. They identified some of the naive assumptions that often weakened attempts to 'share good practice'. One of our expert witnesses described two important methods, used by London Challenge, to increase the chances of effective knowledge sharing:

1. It was important to quality assure the expertise that was about to be 'shared'.
2. Expert practitioners needed very careful training if they were to undertake work as coaches of other, weaker practitioners.

External evaluation of London Challenge was undertaken by the inspection agency OFSTED (similar to ONESQA) and also the National Foundation for Education Research in the UK. Both agencies concluded that the work of the Teaching Schools and the National Leaders of Education had been highly effective. The OFSTED study (OFSTED 2010) commented on how the National Leaders and other expert teachers were able to encourage an impressive level of professional reflection in the weaker schools.

The National Foundation study (Rudd et al., 2011) stated that the weaker schools liked the way they were receiving support from their peers rather than from local or national government officials. The fact that other school leaders and teachers were providing the assistance gave the intervention credibility and authenticity.

'The key change, evident in both Teaching Schools and the work of National Leaders of Education, has been the importance of peer-to-peer relationships and a stronger emphasis on 'real' practitioner-based school contexts, with school staff responsible for the delivery of school improvement strategies at all levels.' (Rudd et al., 2011: 41)

Significantly, these external evaluations also concluded that the work of expert headteachers as consultants to groups of other schools had benefits for the 'home' school of the expert headteachers. By visiting other schools and providing help the National Leaders of Education had an unusual opportunity for rich professional learning. By helping others they were also able to help themselves.

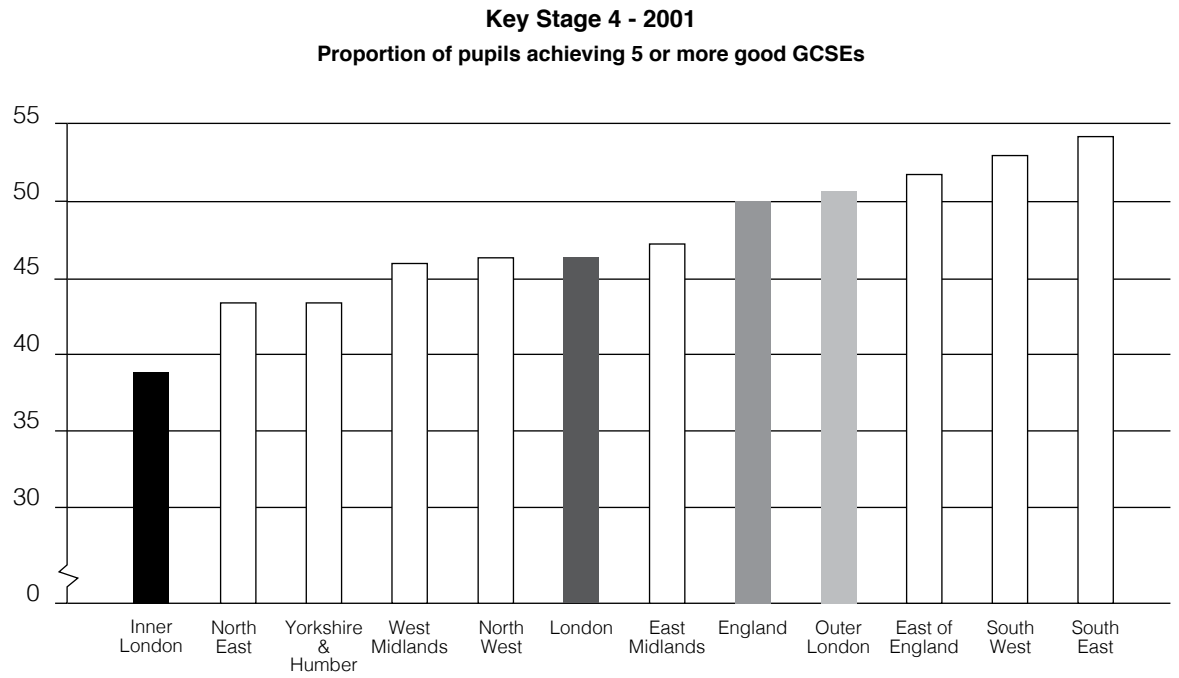
We interviewed one of the National Leaders of Education. She expressed very strongly the importance of the cultural change that made possible a new sense of shared accountability and support at headship level. For her the London school system had matured from one characterised by crude competition to a much more mature blend of competition and partnership based on shared accountability for the well-being of all children in London.

'I think there is a real spirit of collegiality across London schools. There is much less competition than I experienced in the early days of my headship. But there is a real pride in being in a London school and being part of this very successful movement. And even though people know that circumstances can be challenging they also know that there is support out there because the support will come from other London head-teacher colleagues. It is much more of a partnership culture now, with much more of an awareness of responsibility for all community schools and outcomes for all children in the local community and not just your own.'

The impact of the London Challenge

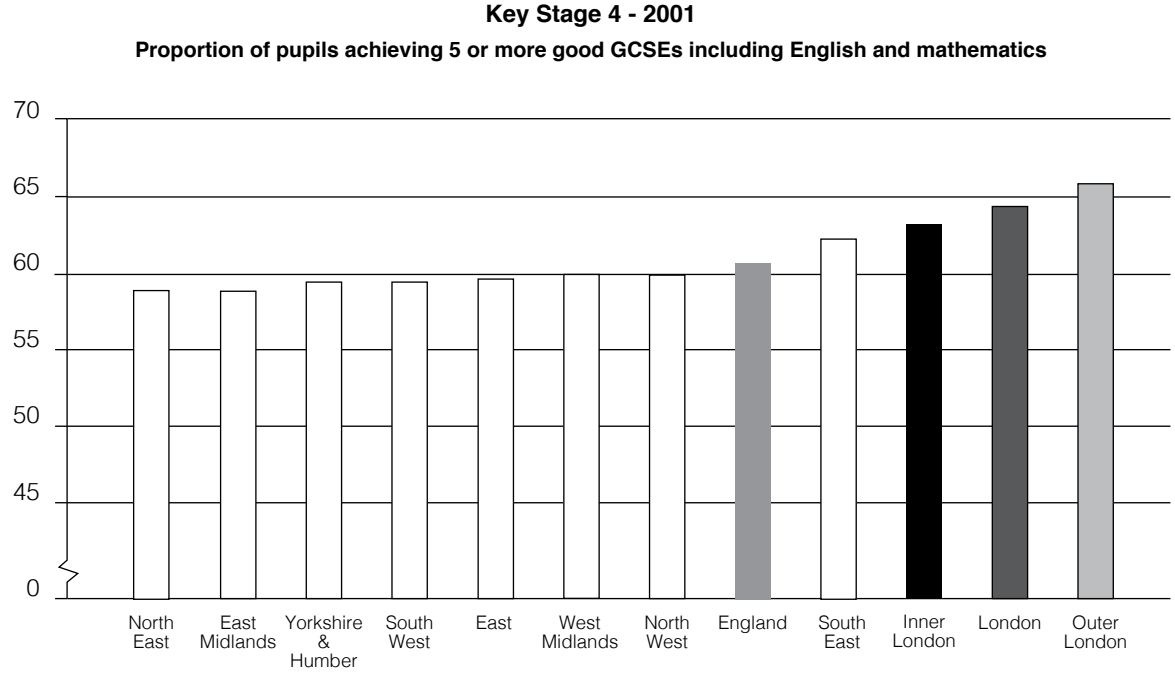
Evidence for the success of London Challenge is provided through test scores and inspection grades. Inner London government schools were the worst performing in England in 2001 but today they out-perform the government schools in all other regions outside London using the GCSE tests for 16 year-olds as the measure. Figures 1 and 2 below show the change in test score performance between 2001 and 2013. The black bar represents the performance of students in inner London, which was the worst performing region in all England in 2001. By 2013 inner London had overtaken all other regions except for outer London and no other region was performing at a higher level than the London performance.

Figure 1: Test scores for 16 year olds in England 2001 by region of England



Source: DfE final data.

Figure 2: Test scores for 16 year olds in England 2013 by region of England



Source: DfE final data.

Improved school effectiveness according to school inspection reports

Improvement in London schools after the London Challenge has not solely been seen in the exam results obtained by pupils in London schools: inspection data from the national school's inspection agency (OFSTED similar to ONESQA) indicates significant changes in the overall effectiveness of schools and the quality of teaching in London between 2000 and 2013. Figures 3 and 4 show that based upon inspection judgements (ratings of good or better), schools in London have gone from performing below the national average to exceeding it. Although this swing is evident in primary schools (for students aged 5-11) it is even more marked in secondary phase schools (for students aged 11-18), where there has been a swing of 17 percentage points in overall effectiveness and 21 percentage points in the quality of teaching).[1]

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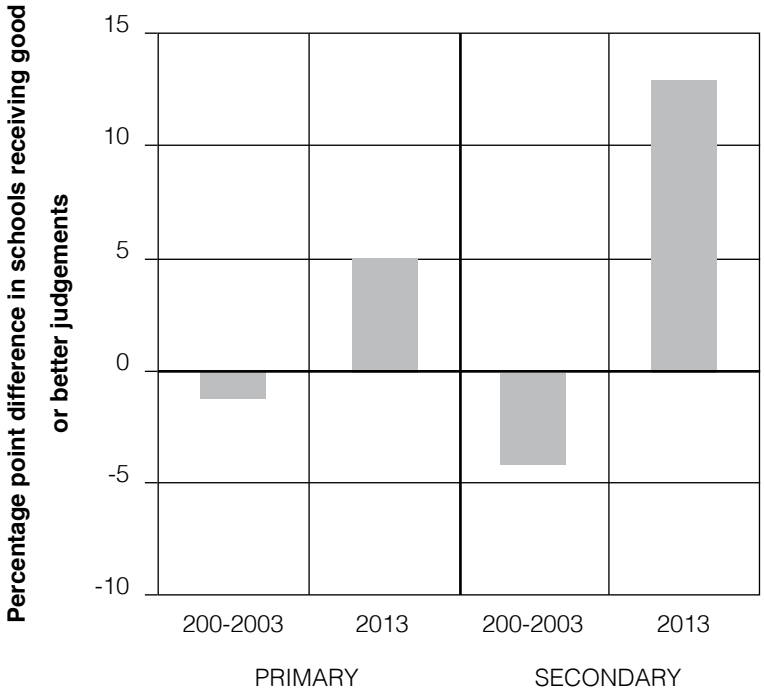
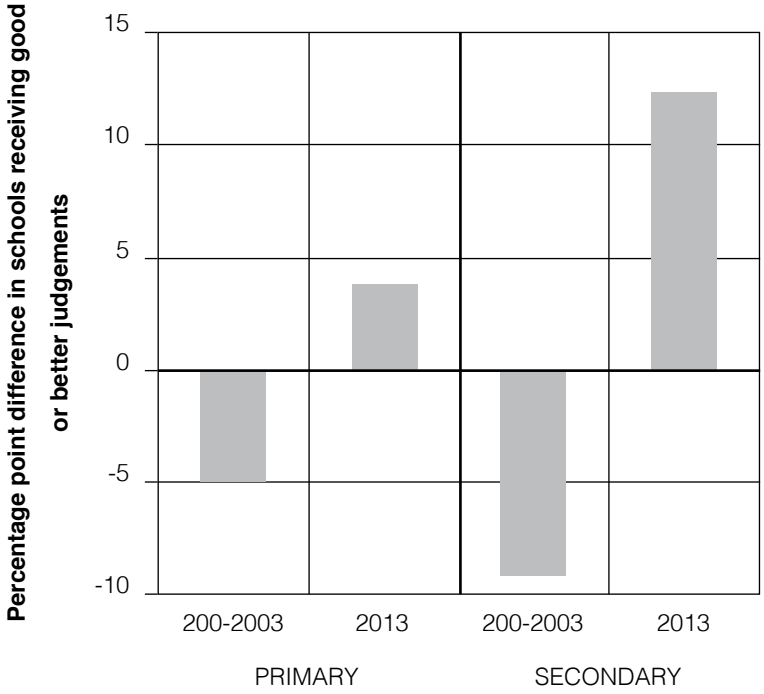
[1] Figures 3 and 4 are based upon data provided directly by Ofsted. Available data for the period 2000-2003 is based upon only those schools that were inspected in that timeframe, data for 2013 is based upon the Ofsted rating held by all schools on 31st August 2013. Due to the changing nature of how Ofsted reported their data, as well as changes in inspection frameworks, these charts should be approached with caution. Nonetheless because both graphs show the differences between London and England at given time points they are a valid measure of change.

Figure 3: Difference between London and England: schools judged good or better for overall effectiveness



Source: Ofsted, 2006 and Ofsted, 2014a

Figure 4: Difference between London and England: schools judged good or better for quality of teaching



Source: Ofsted, 2006 and Ofsted, 2014a

Conclusion

London Challenge was based on a similar philosophical principle to the Thai One for Nine programme. It was based on a view that high performing schools have a moral responsibility to reach out to low performing schools and help them. There was a particular emphasis on the way school leaders of high performing schools-designated as National Leaders of Education-should work with other school leaders in weaker schools. The evidence suggests that this programme has had a positive impact on school improvement in the weaker schools.

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ASEAN Higher Education Reforms:

The Crucial Importance of (Inter) Regional Qualification Frameworks and Learning Outcomes Conventions for Regional Integration Within the ASEAN Community

Prof. Dr. Iring Wasser
Managing Director of the German Accreditation Agency ASIIN
and President of the European Alliance for Subject Specific
and Professional Accreditation and Quality Assurance"
on the occasion of the conference
"Quality Assurance, Quality Building and Quality Culture",
8-10 December 2014,
Bangkok International Trade and Exhibition Centre, Bangna, Bangkok.

Abstract

The ASEAN region is one of the most vibrant and forward moving regions internationally. On the ***political level,*** the concept of an ASEAN Community by the year 2015 has fueled the current momentum which is supported and driven by long-standing ***governance structures*** (such as the Southeast Asian Ministers of Education Organization (SEAMEO)); in the ***economic realm,*** the ASEAN Economic Community (AEC) and the Free Trade Protocol (AFTA) process with its integration of a considerable array of harmonization processes necessary for a single market are driving forces. In security questions, the Asian Regional Forum (ARF) provides a common platform.

In spite of positive developments in these and many other domains, **impediments for the realization of a prosperous ASEAN Community remain in place and call for unified action.** As far as the ***cultural integration*** is concerned, it has been argued that the concept of an ASEAN (or ASEAN + 3 or for that matter an all Asia) culture currently is still not sufficiently developed. It is furthermore recognized that ***human resource development*** plays a key role for the ASEAN community before the background of rising unemployment in some parts of the region as a result of a growing skills gap between the competence profiles of HE graduates and those required by the ASEAN labor market. The unresolved issue of mutual recognition of educational and professional qualifications also negatively impacts on the ASEAN community idea insofar as it jeopardizes academic and professional mobility across borders. There is clearly a ***need for intensified regional harmonization efforts of the ASEAN higher (as well as vocational education) system,*** which in many ways constitutes the backbone of the ASEAN community ideal. This goes hand in hand with the need to ***further collaborate in the field of quality/assurance of HE institutions and programs*** as a prerequisite of building trust in educational qualifications in the region.

In the context of this paper, it is finally obvious that Europe and Asia are looking to each other for the best solutions, that many of the ideas currently discussed in the ASEAN region have been or continue to be discussed under similar auspices in the

European Community. In other words there is an ongoing ***inter***regional harmonization process which gives the opportunity for comparative benchmarking analysis and future collaboration (which even transcends the core ASEAN region as in the example of the ASEM education process).

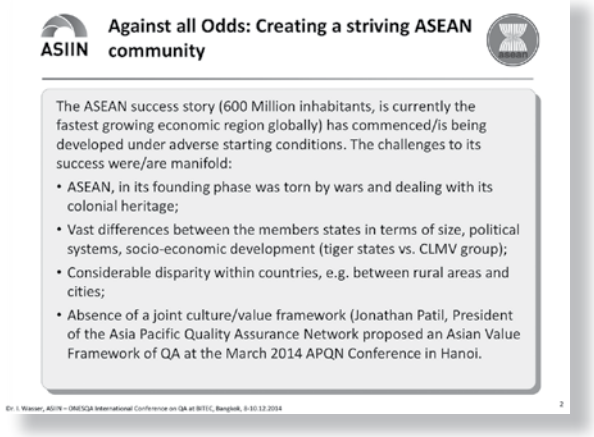
It is before this background that the author of this contribution to the SEAMEO conference

a) Provides an analysis of the most important current initiatives in the area of Higher Education at the ASEAN level designed to foster regional harmonization and to live up to the aspiration of the ASEAN community

b) Examines by the same token joint new policy lines and activities of the European and ASEAN/Asian higher education sector to that regard, while

c) Specifically looking into and emphasizing the crucial role of **(inter)regional qualification frameworks and competence frameworks in the HE sector** on the basis of an agreed set of learning outcomes for academic and professional mobility in the region. The focus on (achieved) Learning Outcomes and related qualification frameworks on the regional level is intimately linked to the growing awareness, that harmonization of **educational and quality assurance structures** alone will not win the day, but that the emphasis needs to shift on jointly defined and verified competence profiles of graduates and professionals for the ASEAN region, adding a much needed content element to cross-cultural exchange.

Keywords: Academic and Professional Mobility within ASEAN, Recognition of Qualifications



4 Founding Pillars of the ASEAN integration process

ASEAN has come to grow into a viable alliance over a period of almost 50 years on the fundamentals of at least four strong pillars:

- The ASEAN Political-Security Community (APSC)
- The ASEAN Economic Community (AEC)
- The ASEAN Socio-Cultural Community (ASCC)
- The ASEAN Higher Education Space (AHES)

As will be shown, education (on all levels but especially in HE) as well as QA policies have assumed a pivotal role in driving regionalism in the region (a development which was foreshadowed in Europe by the Bologna Process) and in attaining the vision of an ASEAN community. It has equally been instrumental in promoting the ASEAN socio-cultural communityand in supporting continued economic integration.

Important steps towards ASEAN integration: the Political –Security Community (1)

- Precursor was the creation of ASA in 1961 as a reaction to political conflicts/transition from its colonial past (Thailand being the only country which has never been a colony).
- Creation of ASEAN on the 8th of August 1967 by Indonesia, Malaysia, Phillipines, Singapore and Thailand.
- Fueled by the end of the Vietnam war and , even more importantly, the end of the Cold War, Brunei, Vietnam, Laos, Myanmar and Cambodia joined ASEAN and economic activities saw a first peak during the 1980s and 1990s.
- ASEAN is granted an observer status at the United National General Assembly 2006.
- On the occasion of its 40th aniversary in Nov. 2007 the ASEAN Charter established ASEAN as a legal entity (reference being made to the EU as a model at the time).

Important Steps towards ASEAN integration: the Political –Security Community (2)

- **Today sophisticated integrated political communication platforms are in place:**
  ASEAN summits (annually since 2001, bianually since 2009); ASEAN + 3 (1997), ASEAN-CER (Australia, New Zealand), East-Asia Summit encompassing 18 countries (USA, India, Russia), Asia-Europe (ASEM) Meetings since 1996.
- **Important Security Agreements have been ratified by ASEAN members:**
  - South East Asia Treaty Organization (SEAMEO) international organization for collective defense, created in 1954 as a response to the spread of communism, dissolved on the 30-June 1977.
  - Replaced in 1994 by the **ASEAN Regional Forum (ARF)**: formal official multilateral dialogue in the Asian Pacific Region encompassing 27 members.
- **Southeast Asian Nuclear Free Weapon Zone** (1995) and the **Convention on Counter Terrorism (ACCT)** (2007) are completing the picture.

Landmarks of the ASEAN integration process: the Economic Community (1)

- **ASEAN Free Trade Area** (AFTA) 1992
- **ASEAN Framework Agreement on Trades and Services** (AFAS) 1995
- **ASEAN Investment Area** (free flow of investment within ASEAN)
- **ASEAN Economic Community (AEC) by 2015**
  Single market and production base, highly competitive economic region of equitable economic development.
- **ASEAN Banking Integration Framework**, integration of financial services, regional economic scorecard (in line with the EU Internal Market scorecard) **by 2020.**

Contributions to the ASEAN integration process: the Socio-Cultural Community (1)

- Symbols of ASEAN unity: the ASEAN Anthem (20. November 2008): "Raise our flag high, sky high..., ASEAN we are bonded as one... for its the way of ASEAN."
- The ASEAN flag (blue represents peace and stability, red depicts courage and dynamism, white shows purity and yellow symbolises prosperity)
- ASEAN identity: "One vision, one identity, one community."
- ASEAN members in the Bali Accord (27-October 2013) agreed "on a shared vision of ASEAN as a concept of Southeast Asian nations, outward looking, living in peace, stability and prosperity, bounded together in partnership, in dynamic development as well as a community of caring societies."

Contributions to the ASEAN integration process: the Socio-Cultural Community (2)

- ASEAN Football Federation, accredited by FIFA; the ASEAN championship inaugurated in 1996 as the Tiger Cup (due to the sponsorship of a well known Asia Pacific brewery); the Tiger Cup was subsequently renamed in the ASEAN Cup.
- Personal encounters (visa free intra-ASEAN , more than 50% of tourists are coming from neighboring ASEAN countries);
- In employer/student surveys a vast majority (especially in Thailand) feel as citizens of ASEAN; agree that ASEAN membership is beneficial;
- The ASEAN way: ideals of non-interference, informality, minimal institutionalizations, consultation and consensus.

Due to its consensus-based approach, every member has a veto power, issues remain unresolved until agreements can be realized (can potentially develop a positive as well as negative impact on educational/QA processes.

ASIIN The ASEAN Higher Education Space

Difficult starting conditions for a region, which today encompasses 6500 HEIs and 12 million students in 10 countries:

- Highly diverse HE sectors in the ASEAN region , little academic exchange, uncertain recognition of academic qualifications; predominance of the private over the public HE sector in ASEAN.
- Tertiary education overall comparatively weak, though impressive gains have been made in recent global rankings; widespread focus on teaching + service to the community, not so much on academic research.
- Language barriers impede academic exchange, English as a common language not developed well enough.
- Internal and External Quality Assurance Systems are in highly divergent states of development (PAASCU 1957, and Myanmar are still establishing), lack of funds, qualified experts, lack of awareness of QA, limited tools.

ASIIN Political Support and Instruments for Regional HE Integration in the Asian HE space (1)

SEAMEO – South East Asian Ministers of Education Organization already established in 1965 to promote regional cooperation in education, science and culture (key goal education for all by 2015 is to "reach the unreached");

It is supported by the **SEAMEO Regional Centre for HE Development** that was established in 1993, to oversee the implemenation of the ASEAN five-year regional work plan on Higher Education 2011-2015;

Key objectives:

1) **Capacity Building for HEIs** in the region (study visits abroad, workshops on governance, management, internationalization etc.) .
2) **Internationalization**: promotion of cross border mobilty via the Asian International Mobility for Students Programme (AIMS). It started in 2009 as the M-I-T (Malaysia, Indonesia and Thailand) pilot with a limited number of five disciplines. By 2015, it has been transformed into a fully fledged exchange programme for all 10 member countries with 10 disciplines (though the exchange numbers with 500 target students is still small) compared to its role model, the European ERASMUS programme .

ASIIN Political Support and Instruments for Regional HE Integration in the ASEAN HE space (2)

3) Regional HE Harmonization is furthermore driven by the ongoing attempts to establish **an ASEAN QA Framework/System (core components criteria, procedures, peer training and code of good practice).**

• Two players are in the field. On the one hand, the **Asian University Network**, which took a lead in initiating its QA scheme in 1998; since then the AUN has developed policies, criteria, guidelines, benchmarking and assessment instruments

• In 2008, a second strong organization appeared on the scene. Supported by SEAMEO/MQA, the **ASEAN Quality Assurance Network (AQAN)** with 11 national QA agencies came into existence. In 2011, AQAN agreed **to develop a regional ASEAN QA Framework for Higher Education** (**AQAAFHE**).

• **Between 2011-2014 the ASEAN-DIES** project was launched, wich brought together all stakeholders (AUN, AQAN, SEAMEO Rihed, as well as ASIIN, the DAAD, the HRK and ENQA). This capacity building project (with the participation of 26 ASEAN universities and all AQAN accreditation agencies) refined existing IQA/EQA tools, to be further worked on in the framework of the EU SHARE programme.

ASIIN Political Support and Instruments for Regional HE Integration in the ASEAN HE space (3)

4) Regional HE Harmonization via ***the establishment of an Asian Academic Credit Transfer System*** (currently a pilot project is under way: building a Common Credit Transfer System for the Greater Mekong Subregion (GMS) that explores which credit transfer systems are in place; prior to that there has been the University Credits Transfer System (UCTS) since 1994 (little acceptance); AUN´s Credit Transfer System (with 30 members that has had a little impact).

5) Regional Harmonization through the **ASEAN Qualification Reference Framework,** which just has been approved and endorsed by the trade and education ministers, to be implemented by ASEAN members until 2018.

The basis for this AQRF is the already mentioned ASEAN Framework Agreement on Trades and Servies (AFAS). In 2007 the ASEAN Economic Blueprint was signed. Mutual Recognition Agreements were concluded with regard to professional qualifications in engineering, nursing, architecture, surveying, medicines, dentistry and accounting . It is underpinned by the East Asian Summit Vocational Educational and Training QA Framework and its quality assurance principles.

ASIIN Comparative Analysis of the political context of HE/QA: the story in Europe (1)

Completion of the European Higher Education Area until 2020, in which citizens can choose from a wide and transparent order of high quality courses and benefit from smooth recognition procedures Goals: European knowledge society characterized by high mobility and permeability, lifelong learning	Promotion of comparability and compatibility of degrees: Three cycle study system, ECTS, adoption of a system of easily readable and comparable degrees, Diploma Supplement, permeability of study structures Promotion of the European Dimension in Higher Education	**Academic Mobility**
Common European Market Goals: freedom of movement of workers, right of establishment, freedom of services. Declaration of Lisbon, Barcelona: "to make Europe the most competitive and dynamic knowledge-based economy in the world."	The European Directive on the recognition of professional qualifications: Goal: "A clear, secure and quick system for the recognition of qualifications in the field of the regulated professions is required to ensure free movement." The EC institutions and member states should facilitate employment and the provision of services through wholesale consolidation of the existing regimes of professional recognition in the regulated professions.	**Professional Mobility**

ASIIN

The new magic words:

European/National/Disciplinary qualification frameworks on the basis of agreed learning outcomes

Transnational cooperation in QA/Accreditation

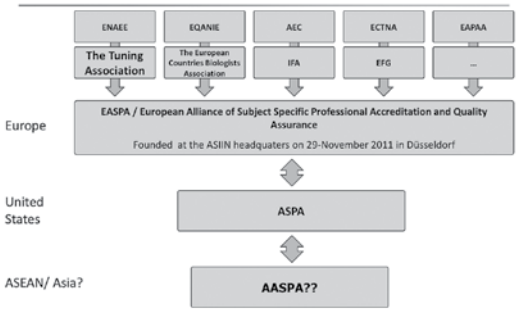
Comparative Analysis of the political context of HE/QA: the story in Europe (2)

The **Bologna-Process** since 1999 can be characterized by two phases:

In the **first decade between 1999-2010,** the Bologna process is characterized by structural elements such as the introduction of a three-cycle study system, the European Credit Transfer Systems, the Diploma Supplements etc.. On the level of European QA-instruments the development of the European Standards and Guidelines as well as the introduction of the EQAR are and continue to be of prime importance. The generic Dublin Desciptors are the underlying foundation of the European Qualification Framework.

Until 2020 the European Higher Education Area relies more and more on content-related elements such as the development of European learning outcomes, competence profiles and (cross-)national qualification frameworks (including an integration of the Bologna with the Copenhagen frameworks). Building on the Tuning activities that are subject to specific European QA networks are contributing to academic and professional mobility in the EHEA.

Organisational Background of specialized (and general!) accreditors



ASEAN/European Instruments for Regional HE Integration

Europe, Bologna	Three cycle study system ECTS Diploma Supplement Exchange Programs via ERASMUS	European Standards + Guidelines EQAR-Register	European Qualification Framework/Dublin Descriptors NQFs European Directive on Recognition of Professional Qualifications, Professional Cards	Tuning EASPA
ASEAN	Three cycle study system ACTS Diploma Supplement AIMS	Chiba-Principles ASEAN Quality Assurance Framework AQAN + AUN	Asian Qualifications Reference Framework to be implemented by 2018 NQF´s	Tuning Thailand AASPA?

ASIIN: European disciplinary Quality seals and labels

An ASIIN-procedure on the programme / course / module level may lead to different seals

Engineering, Natural Sciences, Informatics (Economics)

National German (public, generic)

Akkreditierungsrat

ASIIN Accredited Degree Programme 2013-2018

ASIIN CONSULT Certified Module 2013-2018

Informatics

Euro-Inf

Chemistry

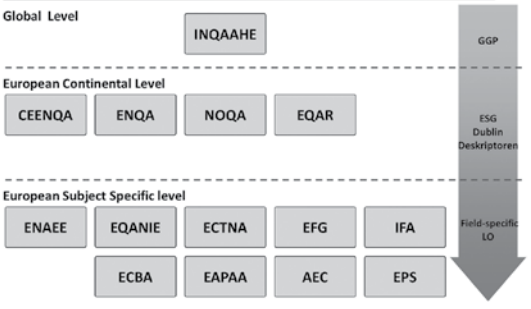
EUROMASTER

EUROBACHELOR

Engineering

EUR-ACE®

The organisational background of QA (in Europe)



Second INQQAHE Global Conference for Specialized and Professional Accreditors

Second Global Conference for Specialized and Professional Accreditors

Date: Tuesday, 31 March 2015, **Time:** 13:30 – 16:30 h,

Location: INQAAHE Conference, The Drake Hotel, Chicago, USA

Objective: The conference will revolve around the following topics:

- The importance of transnational disciplinary qualification framework and LO conventions for regional integration processes, as witnessed in almost all world regions.
- The process of developing benchmarks/methodology of elaborating disciplinary standards and their link to mutual recognition agreements.
- The introduction of professional cards as a tool for fostering international mobility Successful examples for regional/continental professional QA networks from around the globe: here the floor will be given to continental organization from America (ASPA), Europe (EASPA) and other member associations from Africa, the Americas as well as Asia to present their newest ideas and endeavors to the interested public.

ASIIN Long history of European-Asian Cooperation in HE and QA

Given the striking similarities between the ASEAN and EU integration processes, and the fact that both regions witness a substantial incorporation of HE into regionalism agendas, it is not surprising that the cooperation between both regions is intensifying at an ever increasing speed:

- **March 2011**: EU launches the **Thailand-EU Cooperation Project** with the Royal Thai government; major goals are capacity building of Thai HE, move towards ASEAN integration, introduction of qualification frameworks and Tuning HE structures, evaluation of Thai + ASEAN studenty mobility programs.
- At around the same time the **ASEAN-DIES Project** started.
- The EU is **currently renewing ist engagement with ASEAN HE under the EU Share programme** with more than 10 million EUR (50% invested in driving mobility intra ASEAN states and from ASEAN to EU).
- The **new ERASMUS PLUS programme** features Asia/ASEAN as one of the core regions (as a matter of fact with highest funding of all 10 target regions! – deadline for joint applications is the 10th of February 2015).

ASIIN What are the criteria used to assess a Capacity Building project?

- At least one eligible Partner Country must be involved
- Minimum **two HEIs** from each of the eligible **Partner Countries** (HEI as a whole, not institutes, etc., even if it is a legal entity).
- At least **three EU Countries** with minimum **one HEI** from each of the EU Countries taking part in the project (EU HEIs must have Erasmus Charter).
- Consortia must include at least **as many Partner Country HEIs as there are EU HEIs.**
- Association, organisation or network of HEIs counts as only one partner from the country where the headquarters is based.
- For *structural projects*: additionally: Ministry responsible for HE

Additional partners: public or private enterprise, public bodies, social partners (chambers, unions, etc.), research institutes, foundations, non-profit organisations, NGOs, networks of HEIs, associations, etc.

→ All must register in EU participant portal online, obtain PIC, submit financial data, and mandate.

ASIIN

Erasmus +

Capacity Building projects in the field of higher education

Deadline for application: 10th February 2015

ASIIN Regional Priorities for Asia

Projects must target priorities:

Category A – Subject areas (Joint Projects)
- Curriculum development in: Physical Sciences, Engineering and Engineering trades, Agricultures, Forestry, Fishery, Environmental Protection etc.

Category B - Improving quality of education and teaching (Joint and Structural Projects)
- Learning and teaching tools, methodologies and pedagogical approaches including learning outcomes and ICT-based practice

Category C – Improving management and operation of HEI (Joint and Structural Projects)
- Governance, strategic planning and management of HEI
- Quality assurance processes and mechanism
- Access to and democratisation of HEI
- Developing of research and innovation capacities

Category D – Developing the HEI sector (Joint and Structural Projects)
- University enterprise cooperation, entrepreneurship and employability of graduates
- International cooperation at regional level or cross-regional level

ASIIN Formal Conditions

Applicant
- Higher educational institution
- An association or organization of higher education institutions
- Only for structural projects: a legally recognized national or international rector, teacher or student organization

Duration of project

Capacity Building Projects can last 2 or 3 years.

Budget
- **Total budget**: Minimum 500 000 EUR - Maximum 1 000 000 EUR
- **Staff Cost**: Max. 40% of the total grant
- **Travel Cost**: depending on distance between 180 and 820 Eur0
- **Costs of stay**: depending on the days of activity between 40 Euro and 120 Euro per day
- **Equipment**: only for equipment purchased for the benefit of the HEIs in the Partner Countries, max. 30% of the total grant
- **Sub- contracting**: max. 10% of the total grant (e.g. for translations)

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R Research Presentations

The Impact Measurement Model of External Quality Assessment for Nursing Education, Thailand

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Abstract

The purposes of this study were to develop and test the validity of the impact measurement model of external quality assurance developed by the researcher. The samples were 42 faculties/colleges operating the nursing schools by stratified random sampling. The informants were 568 personnel including the dean, administrative committees, lecturers and other staff. The instruments were questionnaire asking the impact and interview of administrators. Data were analyzed by using LISREL.

The findings were as follows:

1. By the sample's perception, the external quality assurance had impact on faculties/colleges in terms of higher education mission ($\overline{X}$ = 3.70, SD = .82), culture ($\overline{X}$ = 3.65, SD = .82), reputation and image ($\overline{X}$ = 3.63, SD = .80), and administration ($\overline{X}$ = 3.57, SD = .80), respectively.
2. The impact measurement model of external quality assurance was composed of 4 variables: 1) administration 2) higher education 3) culture and 4) reputation and image.
3. The testing of the validity of impact measurement model for external quality assurance was consistent and harmonized with the empirical data (χ^2= 78.44, df = 58, χ^2/df = 1.35, GFI = 0.98, AGFI = 0.96, RMSEA = 0.025, RMR = 0.008) weight of the sub components was between 0.94-0.99 in culture (0.99), higher education mission (0.97), administration (0.96) and reputation and image (0.94), respectively.

Keywords: The Impact Measurement Model of External Quality Assessment for Nursing Education

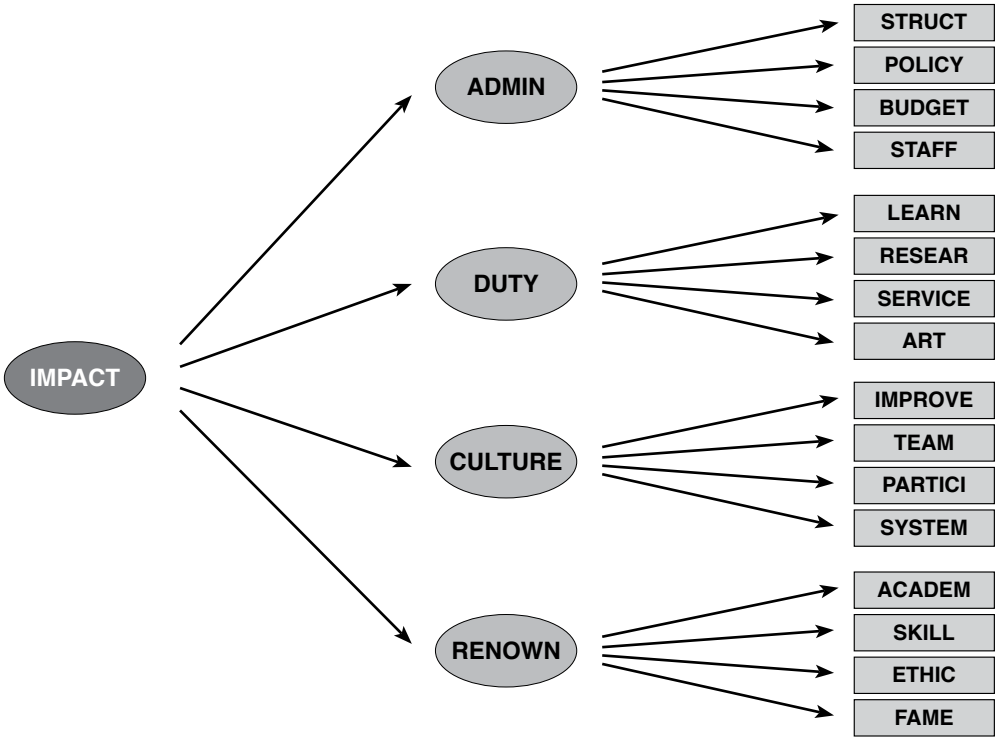
Introduction

The quality of education is a key success factor in national development to improve the quality of education. the foundation of development is development of human quality, they must be knowledgeable, be creative, good attitudes, good values, and good moral. society will be develop to sustainable and happiness by human, who had new knowledge, quickly to access information, cognizant of the situation will progress to a society. In modern society will be competition about the quality of human, that becomes valuable, and It is a key success factor in social competition with other societies. For this reason, many countries begin to focus on education. To use education as a tool to improve the efficiency of human. (Pratchaya Wesarat, 2552: 9; Suthera Prasertsanp, 2545: 218; Thoongtong Jantrarangsu, 2553: 5)

Higher education has a critical role. It is directly responsible for the creation of a flourishing intellectual processes. The Office for National Education Standards and Quality Assessment began to carry out the task of institution's external assessment, accreditation the external assessment, and disseminate to relevant agencies and the public. (Office for National Education Standards and Quality Assessment (Public Organization, 2554). The evaluation criteria of the Office for National Education Standards and Quality Assessment (Public Organization) used to raise the quality of education in line with the second round in education reform made educational system change or not, so that need to audit. The second round of external quality assessment Evaluation has a positive impact or not?. Because of the quality of higher education in the world will pose a major; 1) to higher education with the majority of countries (Massification) 2) the University is an independent, streamlined bureaucracy. (Privatization) 3) competitive and meet the needs of the customers (Marketization) 4) Quality assurance and quality comparable (Standardization) 5) communicated throughout the world (Globalization), and 6) the use of ICT (Technologicalization) (Pitoon Sinlarat, 2546: 1-19). The main impact identified include changes evident from one review to the next; improvements in performance indicators, adoption of formal internal quality process by institutions, student feedback indicating positive change and the employer perception about the improvement in graduate abilities. (Harvey, L., 2006).

The study of literature, both in Thailand and abroad have not found a study to evaluate the impact of external quality assessment . It is new knowledge in academic education and technical benefits to provide useful information to schools and Office for National Education Standards and Quality Assessment (Public Organization). The results of external assessment used to audit and certificate institutions. This will lead to a result in practice to deal with the potential impact of external quality assessment. Therefore, it is interesting to study the impact of external quality assessment by developing a model to measure the impact of external quality assessment and validate of the measurement model.

Development: impact of measure model



Objectives:

The aim of the research was to study the impact of external quality assessment, to develop a measurement model, and to validate the impact measurement model of external quality assessment for faculty / college of nursing education. The model was developed by the researcher.

Methods:

1. Population and sample

The population in this research were the faculty or college of Nursing, All 62 were use in this research, and sample size on the basis of research based on the percentage of the population(Gay, LR, 1992: 137) used the criteria at least 20 percent of the population for fewer, and Sirichai Kanjanawasri (2553: 133) has determined the sample size about 50 percent for 100 to 300 subjects. 42 faculty or college of Nursing were sample, and representative of the contributors are: 1) the director or dean 2) executive committee 3) lecturer, and 4) the personnel in the faculty / college. 30 samples per variable were used. This study has 16 observe variables for 630 person from 42 institutions, and each of 15 personnel. Stratified Sampling was used for the collection of quantitative data, and Quota Sampling in each jurisdiction with in-depth interviews used for the collection of qualitative data, in each jurisdiction about 1-2 faculty or college of Nursing, including 7 faculty or college of Nursing.

2. Instruments

The tools used in this research had 2 series: 1) Impact of external evaluation questionnaire, the information gained from administrator and staff's perception, and 2) a structured interview with the director or dean.

3. Data collection

By sending a mail to sample, and follow-up queries by phone at least three times. 42 faculty or college of Nursing had reply to a query response completely were 568, which accounted for 90.16 percent of the questionnaires. The best returned rate when it should be 90 percent or more (Bailey, 1987: 169; cited in Sinn panpinit, 2553: 217). Open-ended questions was used to interviews with asked permission to record the conversation (note taking), and content analysis was used.

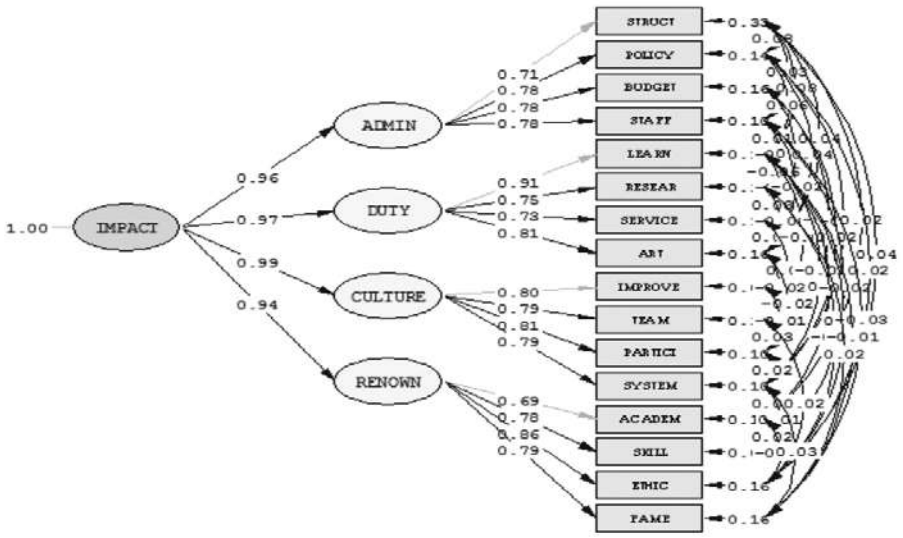
4. Analysis

The information act, used directly score from the questionnaires in the observed variables. The scores included in each individual observed variables were average prior to analysis in the model with the program. LISREL.

1) The information analyzes statistics including mean, standard deviation, minimum, maximum, skewness and kurtosis. Criteria for checking data that had been analyzed using confirmatory factor analysis were: first, the correlation by considering a matrix. The matrix correlation of the variables in the set of variables that were taken into analysis needs to be a relationship between variables that is less than 0.30. Second, the Bartlett's test of Sphericity is significant. Third, the index of Kaiser-Mayer-Olkin Measures of Sampling Adequacy (MSA) has a value of 0.50 or above. The parameter estimation to show validity and convergent validity were: First, the t-statistic is statistically significant and has a value of 1.96 or above. Second, the factor loading using 0.6 or above, and is statistically significant. Third, the coefficient prediction (R2) has a value of 0.50 or above. Forth, the reliability of latent (ρc) has a value of 0.6 or above. Fifth, the average variance extracted by the latent variables (ρv) has a value of 0.5 or above (Diamantopouios & Siguaw, 2000) cited in Sungworn Ngadkeathok, 2553: 34–35, 53-54; Supamas Aungsuchod, Somthawin Wijitwanna, Ratchaneekoon Pinyanuwat, 2553: 24-29; Nongluk Wiratchai, 2542: 51-54, 239; Meyers, LS, Gamst, GC & Guarino, AJ, 2006: 558-559)
2) A measure of harmony between theoretical framework and empirical data were used: first, the chi-Square (χ^2) in a confirmatory factor analysis should not be significant. chi-square and degree of freedom ratio (χ^2/ df) in the analysis of confirmatory factor analysis less than 2.00. Second, Goodness of Fit Index (GFI) has a value of 0.90 or above, Adjusted Goodness of Fit Index (AGFI) values from 0.90 up to 1.00. Third, Root Mean Square Residual(RMR) nearly to 0 and less than 0.05, Root Mean Square error of Approximate: (RMSEA) less than .10 .

5. Results

1) By the sample's perception, the impact measurement model of external quality assessment had impact on faculties/colleges in terms of higher education mission (X = 3.70, SD = .815), culture (X = 3.65, SD = .817), fame and image (X = 3.63, SD = .802), and administration (X = 3.57, SD = .804) respectively.
2) The impact measurement model of external quality assessment was composed of 4 variables: 1) culture measured on continuity of work adjustment, team work, participation, systematic thinking, 2) higher education mission measured on teaching and instruction, research, academic service, art and cultural preservation, 3) administration measured on structure, policy, budget, personnel, 4) fame and image measured on academic ability, ethic and righteousness, practical skills, fame.
3) The testing of the validity of impact measurement model of external quality assessment was analyzed by Second Order Factor Analysis and it was found that it was consistent and harmonized with the empirical data (χ^2= 78.44, df = 58, χ^2/df =1.35, GFI = 0.98, AGFI = 0.96, RMSEA = 0.025, RMR = 0.008), weight of the sub components was between 0.94-0.99 in culture (0.99), higher education mission (0.97), administration (0.96) and fame and image (0.94) respectively.



Chi-Square=78.44, df=58, P-value=0.03820, RMSEA=0.025

Discussion

1. The impact measurement model of external quality assessment consists of 4 latent variables: higher education mission, culture, fame and image, and administration, discussed as follows:

1) Higher education mission affected by the most valuable elements in teaching and instruction, followed by art and cultural preservation, academic service, and research. The smallest value, according to Bouden (2011) found that the endorsement of the Central Committee in the state of Kentucky had a positive impact on teachers in 2 aspects: achievement of students, and the culture. Teachers have an important role in improving schools and improve student achievement in reading, writing and mathematics. According to Fosnacht (2011), it was found that the impact of programs prepares students attended the college level that affect the GPA of students, GPAs was improved and the effect depending on the academic involvement. According to Mahasarakham University, Boromarajonani College of Nursing, Bangkok, and Boromarajo nani College of Nursing, Supanburi had external evaluation round three results related to higher education mission that were at a very good level.
2) Culture affected by the elements of teamwork, the most valuable, followed by continuity of work improvement, Participation, and systematic thinking, the smallest value. Accordance with Harvey (2006) found that the impact of quality assurance was to improve the performance indicators, the quality assurance units and quality assurance mechanisms. The results of evaluation to improve accordance with Kittiya Sreeorn (2547) found that causal model of effectiveness quality assurance for health sciences with latent variables were teamwork, and quality culture. According to Huachiew Chalermprakiet University, Bangkok, and the Boromarajonani College of Nursing, Khon Kaen had external evaluation round three results related to higher education mission that were at a very good level.
3) Fame and Image affected by the elements of ethics and righteousness, the most valuable, followed by practical skills, fame, and academic ability, the smallest value. According to Prawet Wasi (2549), it was mentioned that Thailand is a society with a moral society should consist of morality desirable, at least 8 reasons: 1) honesty; 2) kindness, the public mind, and collective responsibility; 3) a diligent self-reliance; 4) honest, and livelihood sufficiency;
5) Respect the dignity, values, equally; 6) Usage of equitable and sustainable conservation, culture, environment and natural resources; 7) justice and re solve disputes by peace, and 8) The higher mental development continues. According to Kreangsak Chareonwongsak (2546) studied the characteristics of the desirable in Thailand consists of the psychological dimension such as understand themselves, understand the feelings of others, understand the situation changes and different environments. According to Mahasarakham University, Boromarajonani College of Nursing, Bangkok, had revealed that

fame and image that were at a very good level in the results from round 3 of the external evaluation.

4) Administration affected by the policy elements, the most valuable, followed by the personnel, budget and structure, the smallest value. Accordance with Lemaitre, et al. (2010) found that the impact of quality assurance on the work of the university is the development of public information to influence the direction and focus of policy decisions. According to Kittiya Seeorn (2547) found that A Causal Model for Effectiveness of Internal Quality Assurance for the Health Science Area with latent variables were leadership, and decentralized management. According to Khon Khan University, Chiang Mai University, Mahasarakham University had external evaluation round three results related to fame and image were very good level.

2. The validity of impact measurement model of external quality assessment was analyzed by Second Order Factor Analysis, discussed as follow.

1) Validity of impact measurement model of external quality assessment was analyzed by the Chi-Square (χ^2) is 78.44. Chi-square and degree of freedom ratio (df) is 1.35, the Chi-Square in a confirmatory factor analysis should not be significant. In the analysis of confirmatory factor analysis less than 2.00. Therefore, the model is in harmony with the empirical data. In addition, researcher have examined Goodness of Fit Index (GFI) is 0.98, and Adjusted Goodness of Fit Index (AGFI) is 0.96, Goodness of Fit Index (GFI) has a value of 0.90 or above, Adjusted Goodness of Fit Index (AGFI) values from 0.90 up to 1.00 Therefore, the model is in harmony with the empirical data. Moreover, the researcher had checked Root Mean Square Residual (RMR) is 0.008 and Root Mean Square error of Approximate: (RMSEA) is 0.025. Root Mean Square Residual (RMR) nearly to 0 and less than 0.05, and Root Mean Square error of Approximate: (RMSEA) less than .10. Therefore, the model is harmonious with the empirical data. The impact measurement model for external quality assurance, conceptual by research, is harmonious with empirical data. (Sungworn Ngadkeathok, 2553: 34–35; Supamas Aungsuchod, Somthawin Wijitwanna, Ratchaneekoon Pinyanuwat, 2553: 98; Nongluk Wiratchai 2542: 52-60)

2) The impact measurement model of external quality assessment consists of 4 latent variables. The factor loadings show the best of elements that can measure the impact of external quality assessment was culture, followed by higher education mission, administration, and fame/image, discussed as follow.

2.1) The best of latent variables for measuring the impact of external quality assessment was culture, and consisted of 4 observed variables: teamwork, continuity of work improvement, participation, and systematic thinking. The factor loadings were similar, and measure the

impact of the culture was no different. Therefore, there are improved organizational quality standards by established criteria from the Office for National Education Standards and Quality Assessment (Public Organization). Organizations have contributed to teamwork, continuity of work improvement, participation, and systematic thinking. According to Lemaitre, et al. (2010) found that the impact of quality assurance on the work of the University was a certification process linked to teaching, quality assurance linked to workload. According to Harvey (2006), found that the impact of quality assurance improved the performance indicators, the quality assurance unit and quality assurance mechanisms, and the results of external evaluation were used to improve quality in education.

2.2) Higher education's mission could measure the impact of external quality assessment that consists of 4 observed variables: teaching and instruction, art and cultural preservation, academic service, and research. The best of observed variables to measure higher education mission was teaching and instruction. According to Dyett (2011) found that if it were not for the learning community structure they would not have chosen to enroll in college, to increase student enrollment in learning communities included, course offerings convenient for the novice learner, a fundamental advertisement, and more developmental courses linked to credit courses. According to Fosnacht (2011) found that 4 main conclusions were deduced from the study's results. First, AVID, MESA, and Talent Search participants have similar levels of academic involvement than similar non-participants. However, EAOP participation was positively associated with the students' level of academic involvement. Second, none of the four programs were directly associated with a significant change in the participants' GPA. Third, the effect of participation on GPA was found to vary by students' academic involvement for EAOP and MESA. Fourth, program impacts did not vary by students' race, parental income, and class standing; however, the programs appear to be slightly more effective for participants with parents who did not attend college.

2.3) Administration could measure the impact of external quality assessment, consists of 4 observed variables: policy, personnel, budget and structure. The factor loadings were similar, and measure the impact of the culture was no different. According to Tawat Krudmanee (2550) found that the variables that could account for organizational effectiveness were relationship with the community, structure, policy and practice, resources and technology.

2.4) Fame and image could measure the impact of external quality assessment, consists of 4 observed variables: ethics and righteousness, practical skills, fame, and academic ability. The best of observed variables for measure higher fame and image was ethics and righteousness. According to Kreangsak Chareonwongsak (2546) found that of the Thailand desirable features be a skill, critical thinking, communication skills, foreign language skills, information technology skills, social skills, professional skills, aesthetic skills, and management skills. According to Ruja Rodkem (2547), Montre Chulawatanathon (2543) found that personnel activities aimed at assisting or beneficial to the community. It had been recognition from society.

Conclusion

1. The impact measurement model of external quality assessment consists of 4 latent variables: higher education mission, culture, fame and image, and administration. Higher education mission that was affected by elements in teaching and instruction was the most valuable. Culture affected by the elements of teamwork, the most valuable. Fame and image affected by the elements of ethics and righteousness, are the most valuable. Administration affected by the policy elements, is the most valuable.

2. The testing of the validity of impact measurement model of external quality assessment was analyzed by Second Order Factor Analysis and it was found that it was consistent and harmonized with the empirical data (χ^2 = 78.44, df = 58, χ^2 /df =1.35, GFI = 0.98, AGFI = 0.96, RMSEA = 0.025, RMR = 0.008). The impact measurement model of external quality assessment consists of 4 latent variables. The factor loadings show the best of elements that can measure the impact of external quality assessment was culture, followed by higher education mission, administration, and fame/image. The best of latent variables for measuring the impact of external quality assessment were culture that consists of 4 observed variables: teamwork, continuity of work improvement, participation, and systematic thinking. The factor loadings were similar, and measurement of the impact of the culture was no different. Higher education mission could measure the impact of external quality assessment that consists of 4 observed variables: teaching and instruction, art and cultural preservation, academic service, and research. The best of observed variables for measure higher education mission was teaching and instruction. Administration could measure the impact of external quality assessment that consists of 4 observed variables: policy, personnel, budget and structure. The factor loadings were similar, and measurement of the impact of the culture was no different. Fame and image could measure the impact of external quality assessment that consists of 4 observed variables: ethics and righteousness, practical skills, fame, and academic ability. The best observed variables for measuring higher fame and image were ethics and righteousness.

Recommendation

1. Institutions should have to measure the impact of external assessment as part of the organization assessment, to deliver results that will be used in strategic planning purposes and in organization development

2. Praboromarajchanok Institute/Ministry of Health/Ministry of Education use the results to assess the impact for developed strategies, evaluation of personnel, Budget allocation and support benefits in various fields.

3. ONESQA should focus on the impact of assessment by adding an indicator to assess the impact in the fourth round, and the results should be used to evaluate the effects that drive National Education quality and what lacks for better performance

4. Should study effects of external evaluation with samples from other faculties. (Health Sciences, Faculty of Science and Technology, Faculty of Humanities and social science)

5. Using multilevel analysis. Which current program for analysis is more interesting (The HLM program or M Plus)?

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Business Students' Satisfaction Measurement by Using Comprehensive Key Variables

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Abstract

This paper describes the conceptual model for the university operations by using variables or components contributing to the satisfaction of students. The model was developed by studying the previous literature reviews of the past 30 years by several relevant experts and researchers in this area. The model consisted of eight components as follows: academic-related, non-academic related, teaching / interactions / academic support, curriculum design / innovations / assessment, skills developed / future careers, facilities / services / ICT, social life integration, and pre-enrollment / values education. The proposed conceptual model was verified by hypotheses testing of the above eight variables. The results showed the strong ($r \geq 0.70$) and very strong ($r \geq 0.80$) relationships between these eight components and the overall business students' satisfaction. The understanding, how these components contribute to the overall students' satisfactions, will give university leaders insight into the improvement for better quality operations.

Keywords: Student's Satisfaction Model, University Operations, business students' satisfaction and International University.

Introduction

Based on literature, over the past 30 years, many government agencies and researchers have conducted research on the reasons for students' satisfaction and dissatisfaction.

In the USA, the American College Testing (ACT) research, led by Veronica Lotkowski (Lotkowski. V.A., Robbins, S.B. and Noeth R.J., 2004), showed the comprehensive variable search and related them to students 'retention by using the ACT assessment score and high school grade point average, thereby providing policy guidelines for the university operators. The research findings were based on the importance of 10 variables, as follows: academic-related skills, academic self-confidence, academic goals, institutional commitment, social support, institutional selectivity, social involvement, financial support, achievement motivation, and self-esteem.

In the UK, the Higher Education Funding Council for England (HEFCE) showed a national student survey that confirmed the status of "student as a customer" and student satisfaction, recruitment, and retention. It became the priority agenda for most universities by HEFCE (Crawford, 1991). In 2006, the journal of Quality Assurance in Education published an article "Measuring student satisfaction at a UK university", by Faculty of Law and Business, Liverpool John Moores University. The research findings were based on the importance of 10 variables, as follows: teaching ability of staff, subject expertise of staff, IT facilities, lectures, tutorials, and supplementary lecture materials, consistency of teaching quality, learning resources, supplementary tutorial materials, and blackboard, relating to students' satisfaction by using the service-product bundle concept.

Felice Billups (2008) conducted empirical research at Johnson and Wales University, USA, to measure college students' satisfaction by doing the variable search leading to student's satisfaction. The research findings were based on 6 variables: educational experience, development of skills, faculty contact, personal and social growth, sense of community, and overall commitment, thereby the university should have invested in academic quality, curriculum, and teachers.

Allen Gibson (2010) did a comprehensive literature review of the past 15 years with 26 cited references to search for the key variables related to business student's satisfaction measurement by breaking into academic and non-academic experience. The research findings for the 5 key academic variables were: academic staff/teaching, classes/curriculum, advising support, skills developed, and preparation for the future, and the 4 key non-academic variables were: services/facilities, social integration, student-centeredness / responsiveness, and pre-enrollment. There was no empirical result to validate the proposed model of the above variables yet.

Jacqueline Eastman (2011) conducted business students' satisfaction with the interactive technology by exploratory study in the Journal of Education for Business. The result showed those students who had more attitudes towards interactive technology were more satisfied with its use.

Dirk Moosmayer (2012) conducted research on the relationship between values education and business students' satisfaction in German university. The empirical study showed student's perception of value education increased their satisfaction with his institution.

This research proposed a new conceptual model made up of eight key comprehensive variables as follows: academic-related, non-academic related, teaching / interactions / academic support, curriculum design / innovations / assessment, skills developed / future careers, facilities / services / ICT, social life integration, and pre-enrolment / values education.

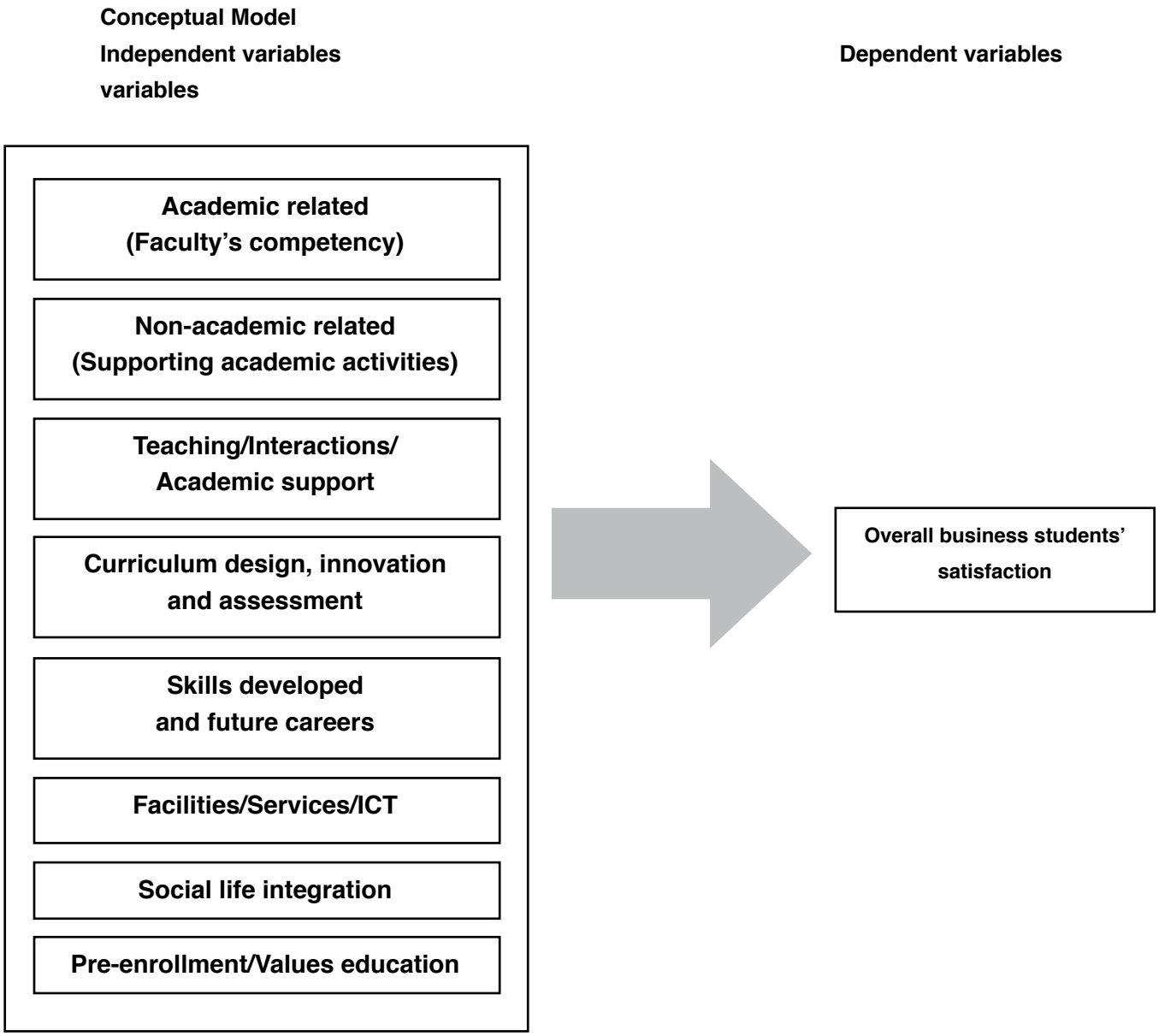
Theoretical Framework and the Conceptual Model

In developing the conceptual model, the author made use of the key variables and definitions as provided in the above literature review given in the reference list. The proposed variables developed with their given definitions. The proposed model incorporated current factors, such as, interactive technology and value education or brand (marketing term) in consideration of the globalization impact by dynamic technological innovations (Eastman J., 2011 and Moosmayer, D. 2012).

The conceptual model was confirmed by five university administrators in Thailand (1-National Institute of Development and Administration-NIDA, 1-Sukhothai Thammathirat Open University, 2-Stamford International University and 1-Academic Council member of Stamford International University).

The eight conceptual comprehensive key variables for the new model were: 1) academic related, 2) non-academic related, 3) teaching/interactions/academic support, 4) curriculum design/innovations/assessment, 5) skill developed/future career, 6) facilities/services/ICT, 7) social life integration, and 8) pre-enrolment/value education, leading to the overall student's satisfaction measurement. The conceptual variable, its conceptual definition and operational components were constructed and used for the student's satisfaction measurement.

Figure 1: The Proposed Conceptual Model



The above variables in the conceptual model measured by using the interval scale, there were five scale intervals in weighing the answers, as follows, 1 = strongly disagree, 2 = disagree, 3 = neutral, 4 = agree, 5 = strongly agree. The operational components converted into questionnaires survey to business students of Stamford International University, Bangkok, Thailand.

The Research Hypotheses and Regression Model

Based on the above conceptual model, the author proposed eight hypotheses to test the relationship between each key variable and students' satisfaction as follows:

1. Relationship between academic related and overall students' satisfaction.
   $H1_0$: there is no relationship between academic related and overall students' satisfaction of the business administration programs.
   $H1_1$: there is a relationship between academic related and overall students' satisfaction with the business administration programs.
2. Relationship between non-academic related and overall students' satisfaction.
   $H2_0$: there is no relationship between non-academic related and overall students' satisfaction of the business administration programs.
   $H2_1$: there is a relationship between non-academic related and overall students' satisfaction of the business administration programs.
3. Relationship between teaching, interactions, and academic support and overall students' satisfaction.
   $H3_0$: there is no relationship between teaching, interactions, and academic support and overall students' satisfaction of the business administration programs.
   $H3_1$: there is a relationship between teaching, interactions, and academic support and overall students' satisfaction of the business administration programs.
4. Relationship between curriculum design, innovations, and assessment and overall students' satisfaction.
   $H4_0$: there is no relationship between curriculum design, innovations, and assessment and overall students' satisfaction of the business administration programs.
   $H4_1$: there is a relationship between curriculum design, innovations, and assessment and overall students' satisfaction of the business administration programs.
5. Relationship between skills developed and future career and overall students' satisfaction.
   $H5_0$: there is no relationship between skills developed and future career and overall students' satisfaction of the business administration programs.
   $H5_1$: there is a relationship between skills developed and future career and overall students' satisfaction of the business administration programs.
6. Relationship between facilities, information and communication technology, and service and overall students' satisfaction.
   $H6_0$: there is no relationship between facilities, information and communication technology, and service and overall students' satisfaction of the business administration programs.
   $H6_1$: there is a relationship between facilities, information and communication technology, and service and overall students' satisfaction of the business administration programs.

7. Relationship between social life integration and overall students' satisfaction.
   $H7_0$: there is no relationship between social life integration and overall students' satisfaction of the business administration programs.
   $H7_1$: there is a relationship between social life integration and overall students' satisfaction of the business administration programs.
8. Relationship between pre-enrollment and values education and overall students' satisfaction.
   $H8_0$: there is no relationship between pre-enrollment and values education and overall students' satisfaction of the business administration programs.
   $H8_1$: there is a relationship between pre-enrollment and values education and overall students' satisfaction of the business administration programs.

The above eight hypotheses were tested by statistical method using SPSS in validating the proposed conceptual model. Each key variable consisted of a set of operational components which were converted into the survey questionnaires. The survey questionnaires distributed to undergraduate business students at Stamford International University. The number of undergraduate business administration students at Bangkok campus was around 450. The sample size of 220 (Taro Yamane's formula) will be used to cover BBA weekday program in all classes.

The proposed 16 hypotheses of which component and how weight of each component contributed to business students' satisfaction were tested by statistical computation of the above survey questionnaires. The t-test of the normal distribution probability was used to test the hypotheses in the regression equation and measure its correlation coefficient (r) and the reliability factor or alpha (α) of the test of dependent variables. The correlation coefficient (r) was set at normal standard of 0.70 and over and the reliability factor or alpha of 0.05 or less. The SPSS software program was used for this testing. The student attributes which were gender (male; female), age, year of education and nationality (Thai; Non-Thai).

The Empirical Study and Results

The socioeconomic characteristics of the sample use shown in the following,

Socioeconomic Characteristics	***Frequency***	***Percentage***
Gender (Male/Female)	106/114	48.2/51.8
Age (17or younger/18-21/22-29/30 or older)	9/169/38/4	4.1/76.8/17.3/1.8
Year of Education ($1^{st}/2^{nd}/3^{rd}/4^{th}$)	116/32/55/17	52.7/14.5/25.0/7.7
Nationality (Thai/Non-Thai)	135/85	61.4/38.6

In the sample, the female scored slightly higher than the male counterpart, which was normal in the social science-related university, like Stamford. The largest student group represented was in the 18-21 age bracket, or 75.5 percent. About half of the students (or 52.7 percent) that participated were first-year students. The international students (non-Thai) represented 38.6 percent and were at the highest percentage among students at the international university in Thailand.

In the survey, most of our sponsors who pay for the students' tuition fee were parents, which were at 84.5 percent, and others that were self-supporting were at 10 percent. In responding to the continuation of graduate studies at Stamford International University, 50.5 percent said "no", 28.2 percent say "yes", and 20.9 percent said "probably yes".

Analysis of variables related to students' satisfaction

From the conceptual model, the proposed eight variables relating to the satisfaction of students were discussed as follows:

It appears that the variables related to academic issues were the most important to the students'satisfaction. They were mainly about instructors (academic-related), supporting staff (non-academic-related), teaching and learning (teaching/interaction/ academic support), skills and future career received, and curriculum (product design/ innovation and assessment) in order. The rest of them were the supporting activities, like, facilities/information and communication technology/services, social life integration and pre-enrollment, ranking in order. The summary of the mean ($\overline{X}$) and standard deviation (SD) is shown in Table 3. There may be different ideas of satisfaction in the non-academic-related or the supporting staff services and the overall satisfaction by the standard deviation of over 1.0. Hence, instructors (academic-related) were of the key interest to students 'satisfaction.

Table shows the mean and standard deviation of each independent variable

Variable	*($\overline{X}$)*	*SD*
1. Academic-related	3.97	0.787
2. Teaching/interaction/academic support	3.63	0.825
3. Skills developed and future careers	3.62	0.861
4. Non-academic-related	3.61	0.865
5. Curriculum design, innovation, assessment	3.59	0.734
6. Facilities/services/ICT	3.48	0.831
7. Social life integration	3.45	0.899
8. Pre-enrollment/value education	3.43	0.848
9. Overall satisfaction	3.57	1.011
Grand Total	**3.62**	**0.681**

The academic-related factor was the highest interest among the business students ($\overline{X}$=3.97, SD=0.787). Business students liked their instructors to prepare themselves well prior to class-teaching ($\overline{X}$=4.08, SD=0.911)), followed by a positive attitude to students ($\overline{X}$=4.00, SD=0.972). Therefore, students expected their instructors to be highly qualified ($\overline{X}$=3.94, SD=0.892) with sufficient knowledge to deliver good teaching ($\overline{X}$=3.95, SD=0.895) and provided two-way communication to students ($\overline{X}$=3.90, SD=0.941).

Teaching/interactions/academic support was the second important factor for business students ($\overline{X}$=3.63, SD=0.825). The students were concerned with teaching methodology, subject content, and advising time. The rest were class management and grading policies. The resulting scores ranked in order were as follows: teaching methodology focused on sharing knowledge and experience between instructors and students ($\overline{X}$=3.80, SD=0.968); the content proportion between theories and practices were appropriate and relevant to skills needed for an industrial career ($\overline{X}$=3.67, SD=0.961); instructors provided appropriate time for academic help and support after classes ($\overline{X}$=3.63, SD=0.825); class scheduling and logistics, technology resource and material support, and academic help desk service were useful ($\overline{X}$=3.59, SD=0.996); and the assessment and grading policy was fair ($\overline{X}$=3.50, SD=1.108).

Skills developed and future careers were the third important factor to students' satisfaction ($\overline{X}$=3.62, SD=0.861). The students care about salary, internship, industrial experience advice, and employment assistance, respectively. The resulting scores of skills developed and future careers were as follows: having high expectations for a future career ($\overline{X}$=3.80, SD=1.093); being employed with a good salary ($\overline{X}$=3.75, SD=1.089); being provided sufficient internship opportunities to develop skills needed by industry ($\overline{X}$=3.57, SD=1.060); being provided access to industry executives to share experience with students both in classes and events ($\overline{X}$=3.50, SD=1.036); being provided assistance to graduates for employment ($\overline{X}$=3.50, SD=0.948).

The non-academic variable was the fourth important factor to business students' satisfaction ($\overline{X}$=3.61, SD=0.865). The students liked their administrative staff to treat personal information with respect and confidentiality ($\overline{X}$=3.70, SD=1.025) because they were concerned about their records in the transcript for job applications and/or further studies. Then, the students cared about the administrative staff's service, such as, showing a positive attitude and sincere help to students ($\overline{X}$=3.63, SD=1.024), having sufficient knowledge of the system to help students ($\overline{X}$=3.60, SD=1.027), keeping accurate and retrieval records ($\overline{X}$=3.59, SD=0.968), being treated equally ($\overline{X}$=3.55, SD=1.065).

Curriculum design, innovation and assessment were the fifth important factor to business students' satisfaction ($\overline{X}$=3.59, SD=0.734). The students were concerned about curriculum designed to fit the industrial needs. The resulting scores of the curriculum environment were as follows: curricula have been revised and updated periodically to meet the industry demand ($\overline{X}$=3.69, SD=0.920); curricula designs are relevant to the industrial needs for employment and entrepreneurship ($\overline{X}$=3.64, SD=0.914); being able to launch a new program for students every year ($\overline{X}$=3.56, 0.989); and being excited about the new programs ($\overline{X}$=3.52, SD=1.031). Overall, the students liked the program they study ($\overline{X}$=3.58, SD=0.969).

Facilities/services/information and communication technology were the sixth important factor to business students' satisfaction ($\overline{X}$=3.48, SD=0.831). The students perceived the university's facilities services, internet and computer laboratory as a necessary support to their learning and extracurricular activities. The resulting scores of the facilities/services/information and communication technology were as follows: facilities and classrooms providing a conducive environment to students' learning ($\overline{X}$=3.72, SD=0.999); being provided appropriate facilities for student activities ($\overline{X}$=3.56, SD=0.994); being provided appropriate support services, such as, library, study area, cafeteria, copying and printing, nursing and first aid, security, and safety to students on campus ($\overline{X}$=3.55, SD=0.976); being provided an appropriate ICT infrastructure, such as internet service, computer and learning software, special technological laboratory, electronic learning platform, electronic library resource, and electronic classroom to students ($\overline{X}$=3.37, SD=1.157). Students liked to hang around the university campus is scored at normal ($\overline{X}$=3.25, SD=1.168).

Social life integration was the seventh important factor to students' satisfaction ($\overline{X}$=3.45, SD=0.899). The activity that the students liked the most was when the university supports the students in providing internship, employment and alumni activities ($\overline{X}$=3.51, SD=0.972). The students were also satisfied when the university provided student life service support from admission till graduation, such as, housing and accommodation, transportation, visa application, orientation, counseling, nursing care and graduation ceremony ($\overline{X}$=3.47, SD=1.031). It seems neutral when the university empowers students by having student organization to run their own activities ($\overline{X}$=3.39, SD=1.061).

In the pre-enrollment/value education factor which was the lowest important factor, the students liked it most when the university had a strong marketing and sale strategy ($\overline{X}$=3.43, SD=0.848). They were most satisfied that the university had a strong marketing and sale strategy ($\overline{X}$=3.51, SD=1.014). They were also satisfied when university provided accuracy of admission information and orientation to meet potential students' expectations ($\overline{X}$=3.45, SD=1.022) and when the university's brand is respectable ($\overline{X}$=3.43, SD=1.061). They were neutral when the university's graduates were easily employable ($\overline{X}$=3.35, SD=0.994).

Overall, the students were satisfied with the university ($\overline{X}$=3.57, SD=1.011). The grand total average of all nine variables, including overall students' satisfaction was good ($\overline{X}$=3.60, SD=0.697) and was strongly correlated with the students' satisfaction.

The Inferential Statistical Analysis

Pearson correlation coefficient was used to test the relationship between all the eight independent variables and the overall students' satisfaction and the ANOVA used to test the hypothesis of each dependent variable. The alpha value or the reliability factor was acceptable when it was less than 0.05 or 5% or when the level of confidence was over 95%.

The results of hypotheses testing were discussed below:

1. Relationship between academic related matters and overall students' satisfaction.

Pearson correlation coefficient between the academic–related variable and the overall students' satisfaction shows a strong correlation (r=0.778) with the alpha value or the significance of zero. The hypothesis test was reliable. Hence, the first hypothesis was valid to say that the academic related variable had a strong relationship with the overall students' satisfaction.

2. Relationship between non-academic related and overall students' satisfaction.

Pearson correlation coefficient between the non-academicrelated variable and the overall students' satisfaction showed a strong correlation (r=0.709) with the alpha value or the significance of zero. The hypothesis test was reliable. Hence, the second hypothesis was valid to say that the non-academic related variable had a strong relationship with the overall students' satisfaction.

3. Relationship between teaching, interactions, and academic support and overall students' satisfaction.

Pearson correlation coefficient between the teaching, interactions, and academic support variable and the overall students' satisfaction showed a very strong correlation (r=0.850) with the alpha value or the significance of zero. The hypothesis test was reliable. Hence, the third hypothesis was valid to say that the teaching, interactions, and academic support variable had a strong relationship with the overall students' satisfaction.

4. Relationship between curriculum design, innovations, and assessment and overall students' satisfaction.

Pearson correlation coefficient between the curriculum design, innovations, and assessment variable and the overall students' satisfaction showed a very strong correlation (r=0.854) with the alpha value or the significance of zero. The hypothesis test was reliable. Hence, the fourth hypothesis was valid to say that the academic related variable has a strong relationship with the overall students' satisfaction.

5. Relationship between skills developed and future career and overall students' satisfaction.

Pearson correlation coefficient between the skills developed and future career variable and the overall students' satisfaction shows a very strong correlation (r=0.845) with the alpha value or the significance of zero. The hypothesis test was reliable. Hence, the fifth hypothesis was valid to say that the curriculum design, innovations, and assessment variable had a strong relationship with the overall students' satisfaction.

6. Relationship between facilities, information and communication technology and service and overall students' satisfaction.

Pearson correlation coefficient between the facilities, information and communication technology and service variable and the overall students' satisfaction shows a very strong correlation (r=0.852) with the alpha value or the significance of zero. The hypothesis test is reliable. Hence, the sixth hypothesis is valid to say that the facilities, information and communication technology and service variable has a strong relationship with the overall students' satisfaction.

7. Relationship between social life integration and overall students' satisfaction.

Pearson correlation coefficient between the social life integration variable and the overall students' satisfaction showed a very strong correlation (r=0.812) with the alpha value or the significance of zero. The hypothesis test was reliable. Hence, the seventh hypothesis was valid to say that the social life integration variable had a strong relationship with the overall students' satisfaction.

8. Relationship between pre-enrollment and values education and overall students' satisfaction.

Pearson correlation coefficient between the pre-enrollment and values education variable and the overall students' satisfaction showed a very strong correlation (r=0.824)

with the alpha value or the significance of zero. The hypothesis test was reliable. Hence, the eighth hypothesis was valid to say that the pre-enrolment and values education variable had a strong relationship with the overall students' satisfaction.

The Chi-square Test of Regression Analysis of Dependent and Independent Variables

The Pearson Chi-square test (r^2)of the regression analysis of dependent and independent variables showed that there were no relationships between the independent variables of gender, age, year of study, and nationality of the business students and the dependent variable of overall business students' satisfaction at the significant levels of 0.414, 0.110, 0.467 and 0.481, respectively.

Conclusion

The proposed conceptual model proposed by the author which was composed of eight variables, namely, academic-related, non-academic related, teaching/interactions/ academic support, curriculum design, innovation and assessment, skills developed and future careers, facilities/services/ICT, social life integration, and pre-enrolment/ values education have strong and very strong relationships with the overall business students' satisfaction. These new comprehensive variables were very important components for the university executives to manage the university's operations, especially the faculty of business administration.

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Students' Employability Can Be Increased by Integration of Learning and Application

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Abstract

How to increase the students' employability is the goal that the universities and colleges would like to accomplish the most in the present. It's an important subject to figure out whether or not the methods can truly help the students' to improve their competencies. The research that was conducted by three professors is mentioned in this paper and provides us the empirical evidence for this issue. Two results came from the analysis. The first result is that the existence of discrepancy between the graduates and the locals firms' opinion towards the combination of competency. The second result is that the percentage of graduates being hired is higher if the competencies by the graduates are closer to the firms' demands. Based on the research, this paper provides some useful and practical suggestions for higher education to shorten the gap between the supply side and the demand side.

Keywords: Competencies, Employability, Job Matching, Discrepancy, Self-Assessment

As the employment market has become more and more challenging these days, more attentions have been paid to the graduates' employment status; even the universities and colleges have put the issue of strengthening the students' employability as one of their developing goals to make the institutions more competitive. Employability refers the one who owns a series of skills, knowledge, career comprehension and personal attitude to make him/herself be successful in finding a satisfying job (Pool and Sewell, 2007). The positive correlation of employability and being employed explains that a graduate with better requisite competencies is more likely to get employment; that is to say, the right set of competencies can increase employability.

Our universities and colleges, especially the technical ones, have come out several innovative strategies to increase the students' employability such as the internship and team teaching with mentors. According to the preliminary result we received from the practices, we cannot be sure if they're all fully elaborated; therefore, besides gradually developing a complete system to truly investigate or evaluate the outcomes, a platform for communication is compulsory to be built up, properly and positively bring into the industries' viewpoints, to balance the academic supplies and industrial demands.

From the paper, Graduate competencies and employability: The impact of matching firm's needs and personal attainments, published in Economics of Education Review by Mercedes Teijeiro, Paolo Rungo and Ma Jesús Freire in 2013, the research methods and findings in it can be referred as the reference to increase the students' employability.

The paper first starts with the literature review for the researches about employability and we notice that the generic competencies such as the abilities to communicate and lead directly matter the success or not in the career; however, the consensus about the best combination of the a graduate's competencies is still missing and it's because of the difficulty in measuring competencies and the limitation of approaches. The authors try to use a single dataset to compare the set of generic competencies requested by the firm and the level of the graduates' attainments to perform in the same set of competencies to present the matching degree between two sides.

The difference between the Supply and Demand sides in the Graduates' Employability

The definition of " Generic Competencies" from [Tuning Educational Structures in Europe] in 2007 is adopted by the authors and the subjects of this survey are the graduates from University of A Coruña [UDC] and the local firms in Spain.The graduates from 2003 to 2004 and 2006 to 2007 are required to evaluate his or her own performance in different competency (score 1 = none and score 7 = excellent) and are they successfully or not to get employed. As for the local firms, they are asked to score the importance for each competency. According to the National Statistics Institutes, Spain, the number of the finalized sample of the graduate is 1,052 and 907 for the firm and the survey was conducted from June to July in 2007.

The analysis of the result clearly indicates the difference between the supply side (the graduates) and the demand side (the firms). The graduates claim to equip with 'reasonable and sufficient" competencies (with the mean score of 4.758) and from 4.3 to 5.4 for each item. On the contrary, the mean score requested by the firms is from 5.4 to 6.3 which is obviously higher than the graduates' self-assessment. To further discuss about the difference of the perspectives toward the best combination of the competencies between the supply side and the demand side, the existence of discrepancy is observed, for example, problem solving ranks 4th for the firms and 17th for the graduates, the ability to apply knowledge to practical situations ranks 8th for the firms and 18th for the graduates, the ability to work independently ranks 19th for the firms and 4th for the graduates and the interpersonal abilities ranks 14th for the firms and 3rd for the graduates.

To study the analysis of the graduates' employment situation in-depth, the authors compare the priorities of the competencies made by the graduates' self-assessment and firms' expectation. It is noticed that the wider the gap between the two sides,

the smaller the similarities between the graduates' competencies and the firms' demands. The result shows that the similarities represent positive influence on the graduates' greater probability of being employed; in other words, the percentage of being hired for a graduate is higher if the competencies own by him/ her can meet the firms demands.

A platform needs to be developed for the conversation to be held between industry and academia to solve the unbalance of supply and demand

The research done by Mercedes Teijeiro, Paolo Rungo and Ma Jesús Freire has provided us two directions to consider the future development of our universities and colleges. We should first start with the survey of employability since the current survey and tracking system adopted by us are only designed to know the situation of the graduates' employability, not the ones to expect the outcomes from the related activities about employability. A more effective system needs to be conceived to follow up the graduates' employability investigation. We can take the systematic investigation from the research done by Mercedes Teijeiro, Paolo Rungo and Ma Jesús Freire as our reference to know the practicability of enforcing the strategies provided by the universities and colleges to increase the employability.

Second of all, the phenomenon about the difference of the supply and demand provided by the academia and industry respectively is revealed from the research done by Mercedes Teijeiro, Paolo Rungo and Ma Jesús Freire and it undoubtedly is an universal systematic issue. The reason to cause the difference is mainly from the surrounding environment as the industry always needs to keep pace with the constant changes under the highly uncertain environment and it would influence their demands for the choice of the employees with diverse competencies. On the other hand, it usually takes longer time for the institutions to cultivate competent persons; therefore, the possibility of not being able to keep pace with the industry is generated and the occurrence of the unbalance of supply and demand is happened accordingly. The gap can be shortened by the development of the platform for both sides to communicate and the viewpoints made by the industry are welcomed to be collected continuously to better control the mismatch between the supply side and the demand side.

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Thriving Towards the Innovative University: The Case of Stamford International University of Thailand

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Abstract

Global education is a multi-trillion dollar industry. Education employs tens of millions of people and entails countless asset to supply the world's learner demands to be able to fit valuable human resource needs for driving the economic prosperity and social goodness, making the world a better place. Education is a globalized activity but it needs the local knowledge environment and the business of education knowledge for successful decision making in the real world. This paper describes an international university, after successfully passing through the quality assurance progress based on Thai Commission on Higher Education (CHE) and Office of National Educational Standards and Quality Assurance (ONESQA), it has continually focused on the strategic approach by making student value proposition. The key successful student outcome was selectively focused, by targeted at producing 100 percent of graduate employment within one year plus an average salary of 30 to 50 percent higher than average Thai market. The business and academic strategies have been seamlessly aligned and deployed by using the Malcolm Baldridge National Quality Award (MBNQA) criteria as follows: leadership, strategy, student focus, measurement, analysis, and knowledge management, workforce, operations, and results. Stamford International University has made successful record of 100 student employment within a year for four consecutive years. At present, the student employment rate has reached at over 90 percent within six months after graduation. The graduate's average salary was between 30 to 50 percent higher than average Thai market. But the international graduate who works abroad has even much higher average salary. The three year cumulative average growth rate (CAGR) of new enrolment was at 50 percent. The strategy towards an innovative university is also discussed concomitantly.

Keywords: innovative university, business of education, quality assurance, Malcolm Baldrige National Quality Award, Thai international university, business and academic strategy alignment

Introduction

Global education is a multi-trillion dollar industry (Everett, Johnson and madden, 2007). From kindergarten to higher education, from basic training to the most professional learning to research, from knowledge transfer to knowledge creation in various forms and levels (Starr, 2014). Education employs tens of millions of people and entails countless assets to supply the world's learner demands to be able to fit valued human resource needs for driving the economic prosperity and social goodness and making the world a better place.

Education is in a globalized activity and it is big business (Starr, K., 2014). Globalization has intensified international economic competition, instigating governments to increase national growth, productivity, efficiency and knowledge creation through the innovative workforce and citizen. Then, innovative education will be playing a new role in enhancing the nation's competitiveness and productivity in a globalized market. After the global financial crisis (GFC) in 2008, governments have seen education as a major vehicle for economic reform, national productivity and growth. In addition, the process of education reform is deeply political and it has raised the questions about its real fundamental purposes (Woods, 2008, p.80). This globalization has forced the education institutions to rethink their operations and behaviours as the world becomes smarter, faster and smaller (Bush, 2008). In addition, the local environment knowledge is the key to successful decision. Kets de Vries (2001) said "In order to achieve the positive outcomes, there are wicked determinations to be made at the local level".

In the real world of education, we cannot solely focus on education. Economics and finance can influence and create social good (Shiller, 2012). Then, the new education leaders need both the local environment knowledge and "the business of education" knowledge (not solely the business education) in order to be able to achieve competitiveness in the globalized world. Sukhdev (2012) proposed new business models to readdress market-centricity and problems associated with social inequalities, environmental degradation and political interference in corporate life. Winter (2012) proposed that organizations must be nimble – adaptive, innovative and high performing to survive in a volatile, unpredictable global business environment and provides a blueprint for dealing with fast, frequent change to achieve business agility.

Christensen (2011), Harvard Business School professor in his disrupting innovation on higher education report, made several interesting recommendations for policy makers as follows: 1) eliminate barriers that block disruptive innovations and partner with the innovators to provide better educational opportunities; 2) remove barriers that judge institutions based on their inputs, such as seat time, credit hours, and student-faculty ratios; 3) not focus on degree attainment as the sole measure of success; 4) fund higher education with the aim of increasing quality and decreasing cost; and 5) recognize the continued important of research institutions.

This paper divides mainly into three parts. First, it discussed the big challenges faced by the university in Thailand in a globalized context. Then, it describes an attempt of an international university in Thailand, after having progressed through the quality assurance based on Thai Commission on Higher Education (OHEC) quality framework and Office of National Educational Standards and Quality Assurance (ONESQA) outcome metrics, it has driven itself towards the innovative university in order to achieve the international class of education and responding to the country's economic and social needs in a globalized context. The paper proposes a deployable approach in achieving the educational quality system by producing the employable graduates to fit the industrial needs. The Malcolm Baldrige National Quality Award (MBNQA) criteria for education performance excellence is adopted and used to describe the approach as follows: 1) leadership; 2) strategy; 3) student focus; 4) measurement, analysis, and knowledge management; 5) workforce focus; 6) operations focus; and 7) results. The final part presented the concluding remarks for further discussion. The university aims to be a constructive part in role playing to help drive the economic productivity forward with the dream to make the world a better place.

Challenges Ahead

From the above literature review and various national meeting and conferences about Thailand and expanded to ASEAN education challenges, the author summarizes them into three major themes as follows: regulation, de-regulation, and default autonomy; constant policy change; and disruptive technology.

1) Regulation, Deregulation, and Default Autonomy.

Comparing to the long history of Western world of education, Thailand has its origination of higher education about 100 years ago. Chulalongkorn University was founded in 1917 by King Rama V to produce Thai graduates serving in various government ministries and departments. Thammasat University was later founded in 1933 to provide democracy and principles of law knowledge for people in a Constitutional Monarchy system. Several professional universities were also established afterwards, mainly located in Bangkok, in 1942, namely, Mahidol (medical sciences), Kasetsart (agricultural sciences), and Silpakorn (arts). In 1960s, several regional universities have been established in Chiang Mai, Khon Kaen, and Songkhla in order to accelerate the Thai rural development. More universities were established during 1970s and 1980s, namely; National Institute of Development and Administration, King Mongkut's Institute of Technology, and Srinakharinwirot University. All the aforementioned public universities have gradually become the comprehensive universities with their own Acts and more autonomy. The open universities, Ramkhamhaeng and Sukhothai Thammathirat, founded in 1971 and 1979 respectively, to provide economical and efficient way responding to the growing

public demand in higher education, presently they share about sixty per cent of tertiary enrolments.

Founded in 1990, Suranaree University of Technology is the first public autonomous university. Followed by Walailak University, King Mongkut's Institute of Technology-Thonburi, and Mae Fah Luang University in 1998.

Forty Rajabhat Universities (formerly provincial Teacher Colleges) and nine Rajamangala Universities of Technology (formerly provincial Technical colleges) were established by the Act of 2004. Later on, Pathumwan Institute of Technology (formerly Technical College in Bangkok) and twenty community colleges were established.

Thai Private Higher Education Institution Act was promulgated in 2003, followed by the present sixty eight private higher institutions, including 34 universities, 5 institutions and 29 colleges to help reduce the big burden of Thai national education budget. Stamford International University is a private university in Thailand.

165 education institutions in Thailand are different and diverse, playing the same role for higher education. The Office of Higher Education Commission (OHEC) manages higher education provision and promotes higher education development on the basis of academic freedom and excellence (OHEC publication, 2013). The OHEC manages and controls the education quality by the yearly internal quality assessment to monitor and help improve Thai higher education operational quality. The Office of National Educational Standards and Quality Assessment (ONESQA), a public organization was established by the Act in 2002 to inspect the educational quality of academic institutions every five years (ONESQA manual, 2011). In the past, OHEC has revoked a few private university licenses and closed down many off-campus curricula in both public and private universities due to the lack of proper academic quality inspected by both OHEC and ONESQA.

Along the way, Thai OHEC has exerted all the efforts together with ONESQA in exercising Thai quality frameworks to stabilize and yield improvements to higher education, in general.

Constant Rapid Policy Turnaround

In Western countries, Karen Starr, Victoria Teachers Mutual Bank, Australia, (Starr, V., 2014) described the education and political policies relation that "incoming governments focusing on short-term political agendas change the education policies of their predecessors, often appealing to populist concerns through negative political and media commentary". Educators often get confused what really the government needs and it seems to obstruct their professions in moving towards better education for people. Some criticisms are "provider capture", inadequate standards, and poor returns on education investments. The most often talks of today's topics among the politician and educators are "Education Reform" (Starr, V., 2014).

The educational and political situation in Thailand appears no different from the above Western country situations. In Thai education history, government has played

an important role in its national education policy. The meaning of Thai democracy during the past decade has turned into populist policies in many dimensions. Currently, the following are happening in Thai education.

Some news that hurt Thai education in daily newspapers and television as follows:

"Today's students want degrees, not knowledge, survey finds".....The Nation, 17 September 2014.

"Thais 'lack faith' in their education"..... Bangkok Post, 11 Sep 2014.

"There are 300,000 unemployable graduates out of a million graduates"

"Industry complained that Thai graduates lack of skills they need"

"Thailand has spent the heaviest education budget but standard ranked at the bottom of ASEAN countries"

"Most want education problems solved".....Bangkok Post, 7th September 2014.

Recently, the deputy minister (Dr. Krissanapong Kiratikara, former President of King Mongkut's University of Technology) who is also in charge of higher education interviewed by a daily newspaper is quoted below:

"Universities have been asked to disclose graduate employment rates for fields of study as they launch recruitment drives, to better align supply of graduates with market demand".....Bangkok Post, 27th October 2014.

Ministry of Education has drafted the new Higher Education Act B. E....., aiming to govern and facilitate all the former university Acts, in an attempt to constructively solve educational quality problems and react to the above criticisms by the public concern. Its goal merely aims at producing higher education graduates to meet the industrial needs of professionals at the right curricula and fund them right in both teaching-focused and research-focus universities. The curricula offered should be in alignment with the local content knowledge environment in a globalized context. Thai government expected that this Act shall pass the Parliament under current government.

Disruptive Technologies

Harvard professor Dr. Clay Christensen, who termed "disruptive innovation" in his proposed innovation theories, has described about US higher education in his executive summary of disrupting colleges (Clayton M. Christensen, February 2011), as follows:

"America is in crisis. Employers say paradoxically they cannot find the right people to fill jobs even though the country is facing its highest unemployment rates in a generation. Competition with a rising China and India and their vast populations lend urgency to the need for the country as a whole to do a better job of educating its citizens".

The rapid changing of technological innovations is the major driving force to the "globalization" as we termed it today. With the invention of internet technology during the last three decades, it has spring up with enormous of product applications that make the world moving in a faster pace and it has produced big generation gap

within families today. Social media and innovative devices are the key examples that we can interpret it in several ways for the gap emerged. In education, it is inevitable that technological applications have evolved in many different delivery channels and forms in order to reach, train, and educate people for different conveniences.

Kahn Academy offers free self-paced online courses, materials, resources, and assessment tools in a wide range of subjects. Massive Online Open Courses (MOOCs) are the open-license e-learning courses offered free of charge to all people in the world via internet in the higher education circles from the Ivy-league US universities. They have shown that the high-profile professors from those Ivy-leagues can reach the masses and has quickly run into the millions-faster than Twitter or Facebook (Lewin, 2013).

In an attempt to make the MOOCs feasible, the business model behind it is quite complicated especially the high production costs but the revenue from advertising or the sponsorship costs on MOOCs is questionable to develop further quality education on it. However, the educators are optimistic about MOOCs. Friedman (2013) sums up the fears of many interviewees when he says:

> *"I can see a day soon where you'll create your own college degree by taking the best online courses from the best professors from around the world.… paying only the nominal fee for the certificates of completion. It will change teaching, learning and the pathway to employment. There is a new world unfolding and everyone will have to adapt."*

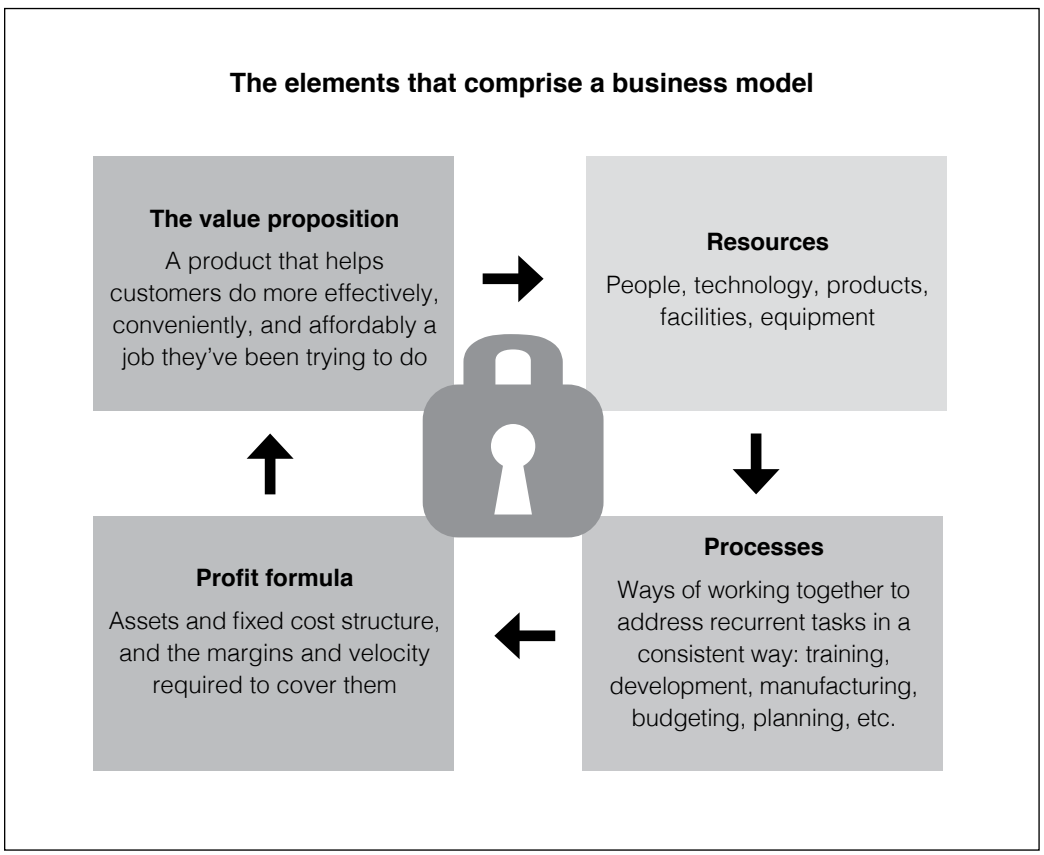
The University of the Future

Laureate International Universities conducted one of the largest surveys of its kind of international higher education circles, by Zogby Analytics, June 2014, about "student perceptions on the future of higher education" through 37 Laureate network of higher education institutions in 21 countries with 20,800 students that responded to the survey. Findings of the survey in understanding towards the university of the future are in the main four areas, as follows: 1) accessibility, 2) flexibility, 3) innovation, and 4) job-focused. The students responded to the four areas that they wanted to see in the future as follows: (Laureate International Universities, 2014)

Accessible	43% - content online for free format courses, 59% - social media platforms to learn and ,in turn, teach other students, 68% - maintain free online libraries where students can access course materials, books, and other reference tools
Flexible	52% - most course will be offered at all times of the day or night, 44% - most courses will be offered without fixed schedules to accommodate students who work or simply prefer learning at non-traditional times, 41% - future students will be able to earn specialised certificates throughout their careers, allowing them to take course at their own pace instead of concentrating academic careers into two-or-four years spans cul minating in a degree.
Innovative	54% - course will emphasis on group projects, 43% - future students will be able to access personalized instruction or tutoring online, perhaps rendering the traditional classroom experience less important
Job-Focused	61% - most courses will be designed by industry expert, 64% - course will be offered in multiple languages, * Over 70% of students prefers careers-oriented skills (not just subject matters will be taught in future universities). *Most of the students see that future of their universities clearly focused on producing graduates who are prepared to excel in jobs that are needed by industries and societies

It is noted that 72% of students in developing countries believe that changes to what kinds of courses will be taught in the future will be better for students.

It is clearly seen that students of the future like to see better accessibility, flexibility, innovation, and more job-focused to be able to actively live in the new lifestyle of digital society. In his "The Innovative University" book, Christensen (Christensen, C., Eyring, H. J., 2011) cited "there are strategic choices and alternative ways in which traditional universities can change to ensure their ongoing economic vitality. The traditional university can survive by breaking with tradition, but thrives by building upon its done best." He made recommendations for existing institutions of higher education for those who emerged from understanding the disruptive innovation, as follows: 1) apply the correct business model for the task. 2) Drive the disruptive innovation. 3) Develop a strategy of focus. 4) Frame online learning as a sustaining innovation (Christensen, C., 2011). In his business model, Christensen proposed four interdependent elements as depicted below:



The key strategic fitting to the local university environment is the right business and academic alignment strategy by 1) research and identify the right products or curriculum in the local industrial market demand that leads to regional and global contexts, 2) analyze the resources both human productivity and financial availability in the annual and long-term plan, 3) design the academic workforce and its operations to fully support the student benefits. The provision of service operations in both academic and non-academic environments must make the value creation to the student in a plan-do-study-action of continual improvement, based on the Deming Cycle (Deming, 1986), and 4) propose the effective and affordable products or curricula, as selected from the marketing research in step one, offering to the potential students, with the strategic pricing leading to the sustainable viable financial feasibility. While implementing and executing the strategies, the university leaders and operators must simultaneously learn through the university's supply chain of education operations directing towards the competitive market mechanism. The key is the local university top leaders must not be ignored by the wealthiness of the local knowledge leading to the globalized context in arriving at the workable strategies to achieve the university's vision and mission. Stamford International University, a member of Laureate International University, started its implementation in 2012, by adopting the above Christensen's business model for its strategy deployment.

Sustainable Quality of Education Towards the Innovative University

The Malcolm Baldridge National Quality Award (MBNQA) criteria (Baldridge, 2013) for education excellence, originated by the US government in 1987, was widely known among American and European university leaders. However, the Ivy-league universities in the US do not seem to be interested in using them. However, the MBNQA criteria was widely practised in the US schools and hospitals. Several US state universities have adopted and run their operations successfully for achieving education performance excellence, i.e., University of Wisconsin at Stout (Baldridge, 2001). In Hong Kong, the MBNQA criteria were used widely in the vocational education (Lee,S.F., Lo,K.K., Leung, R. F., and On Ko,A.S., 2000).

In Thailand, Office of Higher Education Commission (OHEC), Ministry of Education, has introduced the MBNQA criteria or Edpex (renamed by Thai OHEC) program to Thai public and private universities recently. Stamford International University has prepared itself in applying the Edpex program under Thai OHEC encouragement and support. However, when using the Thai OHEC framework and ONESQA higher education standards for quality implementation during the past five years, the author found that the Edpex or MBNQA criteria is a useful tool for Thai public and private universities and it is applicable in the Thai culture and environment. Similar to Thailand King Rama Nine's philosophy of sufficiency economy business standard (SEBS) proposed by the Economic and Social Advisory Council (SEBS, 2014).

The MBNQA or Edpex criteria are as follows: 1) leadership, 2) strategy, 3) customer or student focused, 4) measurement, analysis, and knowledge management, 5) workforce focused, 6) operations focused (Baldridge, 2013). Stamford International University has adopted the MBNQA criteria as follows:

1) Leadership

According to the Thai Private Higher Education Act 2003, the university council is the governing body of the university, and the rector of the university is a member and secretary of the university council boards. Stamford International University's university council members are composed of the business and academic professionals. In the strategic setting, we put the business strategy lead and align the academic strategy and standards to fit the overall strategies. Then, the business tools, such as, finance, marketing, sales, and quality are fully integrated to maximize the student's benefits and make value creation along the way for the on-going value proposition. The university strictly follows and always meets the requirements by the Thai regulatory bodies, such as, OHEC, ONESQA, and other related commercial laws. Included are Thai transparency, legal and ethical behaviour, and societal responsibility system requirements to meet the local culture and in alignment with the globalized context are also seriously considered as a high priority.

2) Strategy

In developing its strategy, the university makes a five year long-term and annual plans to meet the local business environment in all aspects and in alignment with the Laureate global strategy. The PESTEL factors, including politics, economics, socioeconomics, technology, ecology, and legal, as in the MBA textbook (Gamble, 2013) are always followed-up, discussed and considered in the strategy meeting to develop and implement. The projected human (capacity and capability) and financial resource plan are carefully considered to meet the balance of pricing and cost strategies while leaving the profit enough to drive the overall quality forward and to meet the sustainable viable finance. The left margin is necessary for preparing the quality education growth. All the action plan activities must be clearly set by measurable target with the set forth strategic objectives to meet the annual strategic plan. The business goal, along with the academic quality standards, is always set at the high priority to be achievable. The balance scorecard concept is always helpful in making the annual strategic plan.

3) Customer or Student Focus

The word "customer" and "for-profit" may be bad or disliked by academic people. However, they are very useful terminologies when we think about the innovative business model to solve the quality problems in higher education. The author believes that the education quality problem occurred with the old-fashioned capitalist dilemma that can be solved by using Christensen's business model and applying it

in the neo-liberal society and economy ideology. The key strategic concept is to create student satisfaction and the efficient ways to engage the students to serve their needs and to build loyal relationships. The voices of the students are systematically monitored and surveyed through a variety of communication channels, including the social media. The system and mechanism reacting fast to student satisfaction, dissatisfaction and engagement feedback via survey and social media are needed for designing the student complaint management processes in a system.

Satisfaction and engagement of the student to serve the student needs are strongly correlated to the products or curricula offerings. The future student needs are focused on job employment as shown in the above survey Table. Then, the marketing research for curricula or product offerings directed to the industry needs is a high priority. The student or customer segmentation to fit the university's marketing brand is very important to the student admission (or sales) strategy in reaching the targeted student or customer. This segmentation will also make advertising spending more directly effective to the potential customer or student needs. The internet marketing is presently contributed to a higher proportion of students than traditional advertising. The university web page design must be done professionally and directed towards the internet marketing strategies because the social media shows enormous use by the educational generation.

4) Measurement, Analysis, and Knowledge Management

"Information is power" is always true. The university operators in all appropriate hierarchical levels have to be able to fully make use of the right data and information to drive the strategic business goal and academic standards successfully. The information system design with and without computer must be able to address all facts needed to execute the decision-making in an appropriate hierarchical level to the top management. The internal feedback and related external information needed by the organization must be accurately recorded into the information system and make it live daily. In many cases, the predictive capability of information is very useful for the top management to direct the strategy (Davenport, 2014). The data mining tool for big data analysis which is a simple business statistical tools, like, regression analysis and ANOVA are often used to build the predictive capability of the top management (Davenport, 2014).

5) Workforce Focused

The education workforce consists of business and academic people. They need to understand the different management culture. The decision making styles of business people and academic people are different. The business people by nature need a real fast decision-making style directed towards achieving its business goals. The academic people are well-respected with a deep thoughtful and knowledgeable nature but their decision-making style tend to be slower than the business people. The deep understanding of the different nature is very important to make the

integrated teamwork for management and operations. To define the appropriate roles for both business and academic groups is the key to make the paradigm shift for producing the high performance in running the operations of the future university. In addition, the diversity of nationalities in an international university is another important factor for serious consideration among the university executives. The understanding of their cultural differences and origins are also very important to manage and execute the decision-making to success. Stamford International University consists of a diversified workforce of more than 10 nationalities, including Americans, Australians, Canadians and Europeans and followed by Asians and Thais. The international students are from 84 countries with a good proportion of international students that range around 40 per cent among the undergraduate students at the Bangkok campus. The segmentation of international student characters to understand diversified culture is the key to deliver and communicate the teaching and learning methodology used in class and out of class activities. The workforce design must carefully consider the diversity of international and management cultures or else it may give rise to an organizational break-up and failure. Careful consideration must be given to the diversified services among the diversified beliefs and religions of international students. Satisfaction and engagement feedback in both formal and informal channels of communication must be ensured, managed and executed. The personnel policy devised for taking care of the segmented workforce is the key to help them reach its highest performance.

6) Operations Focused

In Thailand, it is very important that the university's academic operation design must strictly follow and comply with Thai OHEC and ONESQA's requirements (OHEC, 2014, and ONESQA, 2011). From the past five year implementation studies of the IQA and EQA among Thai public and private universities, the Thai higher education quality standards and operations have improved (Sirinaovakul, 2013). They are aware of the processes and outcomes of the quality standards. A few private universities that seriously failed in the above standards and requirements have been revoked their licenses, after being given another chance and certain timeframe to make academic improvements.

In the work system requirements, care must be taken to the faculty to student ratios in both teaching and research type requirements. Included are the professional qualifications of the faculty members and Thai academic titles. The practical industrial experience of the teacher is very important. It must be well-balanced with the academic and industrial faculty members. The researchers who have the industrial experience are also very useful in directing the research applications towards the industrial needs.

In the academic process design of the education supply chain management, starting from the marketing and admission policies, to academic preparation of new students, academic operations, student life services, graduation, employability and

industry connections, and alumni relation services, we need to incorporate the most up-to-date data into the student information system. The student information system is needed by the top executives to set an annual target of operational efficiencies. The key performance indicators of each planned activity with its strategic objectives must be properly given to meet the yearly target. The deviation from the target will be used for the next year's improvement plan. In many cases, the six-sigma quality procedures for controlling the academic operation service, and correcting its deficiencies, are very useful. It aims to reach a higher retention rate. There is a significant amount of literature related to academic operations available in research journals (Athiyaman, A. 1997, Bean, J.P. 1983, Billups, F. 2008, Crawford, F. 1991, Gibson, A. 2010, and UK higher education report, 2013). They can be applied and used to manage the service quality system for higher education institutions.

7) Results

The growth of new enrolment since 2010 to 2014 has been impressive with the CAGR of 50 percent, making the present enrolment totalling into many thousands. The most popular programs are international hotel management (allied with Blue Mountain, Australia), international business management, creative media design (allied with Media Design School, New Zealand), bilingual (Thai-English), and the emerging design of blended online education for disruptive technology.

The student satisfaction and engagement survey results by the external market research agent, from 2012 to 2014, have shown yearly improvements in many areas. The academic service (faculty teaching, advising, and counselling) is the highest important factor, followed by non-academic services (facilities and laboratories, internet, cafeteria, student extra-curricular activities). Students recommended strongly to study at Stamford at higher rates every year. The job employment record of the student is at 100 per cent within a year, with the average salary of 30 to 50 per cent higher than the Thai average market. The students who worked abroad have salaries of higher than double of the Thai salary market. The faculty and personnel satisfaction and engagement have been higher than other many Laureate Asia (China, Malaysia, India, Japan, Indonesia, and Thailand) universities. The senior leadership have complied with the Thai laws and regulations and with the Laureate headquarters' policies in both transparency and societal responsibilities. The business is running quite well in Thailand.

Concluding Remarks

In doing the business of education in Thailand, the key to success is to follow and comply with the imposed Thai OHEC and ONESQA regulations and rules. Simultaneously, the investor can apply other quality tools along the way to further achieve the success of academic quality standards. In addition, the Christensen's business model and the university's strategies in responding to the industrial needs are recommended.

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Development of The Educational Quality Assurance System at The Academic Department Level, Prachomklao College of Nursing, Phetchaburi Province, Thailand

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Abstract

The purpose of this Action research was to examine the current condition and needs of the educational quality assurance system at the academic department level and develop the process of the educational quality assurance system at the academic department level, Prachomklao College of Nursing, in order to suit the context and meet standard criteria. The study was conducted by using the action research process based on the concept of Kemmis and McTaggart in two spirals throughout the academic year of 2013. The data were obtained from three heads of academic departments, 2 academic staff members, 13 quality assurance committees and 34 nursing instructors who responded to key performance indicators. In the first phase, all of the respondents completed questionnaires, the instrument was tested for content validity and reliability was .82 by Cronbach's Alpha Coefficient. In the second phase, 3 heads of academic departments, 2 academic staff members, and 13 quality assurance committee members were interviewed. In the third and fourth phases, all Quality Assurance Committee members in 3 heads of academic departments, 2 academic staff members, 13 quality assurance committee members and 34 nursing instructors who responded to key performance indicators participated in focus group discussions and audited this quality assurance system. The data collected were analyzed by arithmetic means, and standard deviations. The data from the open-ended questionnaires, observed data and interview data were analyzed by content analysis.

The results of this study were as follows: 1). The satisfaction of the sample group was high (Mean = 3.66, SD = .52). 2). The Educational Quality Standard at the academic level and Key Performance indicators (KPI) for the educational quality assurance system at the academic department level consisted of four aspects; The internal quality assurance in educational institutes; monitoring and quality assurance supervision; quality assessment; and quality system evaluation. 3). The staff's knowledge and practices were added in the last step of the evaluation system. The system process was completely accepted by educational staff while the output system was mostly accepted.

Keywords: Development / Educational Quality Assurance System / Academic Department Level

Introuction

Prachomklao College of Nursing, Phetchaburi, under the jurisdiction of Praboromarajchanok Institute is a college that emphasizes educational quality assurance and specifies the educational quality assurance system as a strategy as shown in the Strategic Plan for the 2012–2016 Fiscal Years to "push for personnel at all levels to consistently use the educational quality assurance system as a work mechanism" (Strategic Plans for the 2012–2016 Fiscal Years), especially concerning implementation in the institute's primary obligation to provide education. Education provision is an important obligation for Prachomklao College of Nursing, which is an institute of higher education and an important agency in producing quality graduates in response to the needs of graduate users and society (National Education Act of B.E. 2542, 2545 (1999, 2002 A.D.). According to outcomes from the third external quality assurance performed by the Office of the National Education Standards and Quality Assessment (Public Organization), external evaluators provide policy recommendations focused on students and education provision arrangements with specifications that the college should develop more student-focused education for students to practice intellectual skills during education. The college should continually increase the learning capacity of students from the second year and during training at patient wards to enable students to accurately analyse problematic case studies during testing in order to pass tests to obtain licenses for professional practice. Hence, the college should plan development and support students in consistent improvement as identified in courses and outside courses together with follow-up on assessing the capacity of graduates in order to modify operations that are in line with the unique advantages and outstanding features of the college (Cholada Pantusena and Colleagues, 2012).

Prachomklao College of Nursing, Phetchaburi, assures the college's education quality by using the following three main components: 1) quality control in which the college arranges assurance by systematically specifying various quality components. The college is using standard criteria indicators of the Office of the Higher Education Commission, the Office of the National Education Standards and Quality Assessment (Public Organization) and the Nursing Council as the standard for operations in order to ensure quality in the college's operations; 2) quality auditing which is an audit of the system's performance and quality assurance mechanisms established by the college and a systematic audit emphasizing consideration. There are steps to ensure reliability that education will be provided with quality and tangible performance together with processes for providing recommendations aimed at improving quality; and 3) quality assessment which is an assessment of performance focused on analysis to compare the performance of the college in every quality component to determine how performance complies with the educational criteria and standards by setting achievement levels. Quality control, quality audit and quality assessment must be performed concurrently. Prachomklao College of Nursing, Phetchaburi, has three departments consisting of the Department of Maternal Nursing, Newborn Nursing,

Midwifery, Management and Professional Law, the Department of Community and Psychiatric Nursing and the Department of Pediatric, Adolescent, Adult and Senior Adult Nursing. Quality control, quality auditing and quality assessment was performed at the departmental level in the first assessment of the 2012 academic year. Some problems, such as lack of indicators specifically developed for assessment at the departmental level, feedback received from assessed people that assessments were repetitive and increased burdens for people receiving assessment were encountered. Assessors reported assessment guidelines as being vague and academic departments are important in the education quality assurance system because academic departments carry out the main obligation in producing graduates and preparing education with continual participation in the education quality assurance process with the college organizing the aforementioned activities. Therefore, the research group, as an education quality assurance work group, is interested in developing the education quality assurance system at the departmental level in order for internal education quality assurance system operations to be effective and for quality assurance work to have a quality culture.

Objectives

1. To study conditions, situations, obstacles and probable guidelines for problems in assuring education quality at the departmental level at Prachomklao College of Nursing, Phetchaburi.

2. To develop an education quality assurance system at the departmental level at Prachomklao College of Nursing, Phetchaburi.

Overview of Educational Quality Assurance system

1. Internal Quality Assurance System (Institutional Self- Evaluation).

The education quality assurance system can be categorized into internal quality assurance and external quality assurance.

Internal Quality Assurance (IQA) means activities to assure quality in universities which will give university administrators and university councils' confidence that the university operates according to service provision workloads that are in line with internal quality assurance processes. The processes consist of quality control, quality auditing and quality assessment using internal education quality assurance processes by applying principles for managing the PDCA cycle. This is essential in order for personnel to jointly plan, practice, audit and make modifications with focus on feeders, processes, products and results by carrying out work from preparation, operation and reporting systematically. Therefore, educational institutes, agencies at the department, division and section levels must make internal quality assurance a part of regular management; to develop education quality and succeed in all missions from producing graduates, researching, providing academic services for society and supporting art and culture to have quality according to higher education standards.

External Quality Assurance (EQA) means monitoring, auditing and assessing an educational institute's education quality and standards by assigned auditors from the Office of the National Education Standards and Quality Assessment (Public Organization) in order to have better quality and better improvement in education quality and standards that are in line with the identity and emphasis of educational institutes. External quality assurance processes comprise quality auditing, quality assessment and certification. Every educational facility must receive at least one external quality assurance every five years from the most recent assurance and the findings must be presented to relevant agencies and the public.

2. Educational Quality Assurance System at the Academic Department Level of Prachomklao College of Nursing - Phetchaburi

The College of Nursing is an institute of higher education with a mission to teach, conduct research, provide academic services for society, transfer and develop appropriate technologies along with supporting arts and culture. Key factors in the college's academic excellence are composed of an effective management system, a faculty with high capabilities and an atmosphere of an academic community in the organization. Therefore, the college's work can be considered to cover both general management and academic management under the responsibility of the Academic Department or academic groups, which have a duty to supervise and ensure that the college's policies are implemented in practice, according to set objectives. The Academic Department will delegate responsibilities to faculties that are the agencies carrying out academic tasks to achieve goals that are in line with the college's intention. The aforementioned faculties are delegated the following responsibilities:

2.1 Academic Performance–Building and developing educational management courses, educational management that are in line with the courses, setting subjects offered for instruction, appointing professors as instructors and grading evaluations.

2.2 Assessment or Evaluation and planning for the number of professors at the departmental level and searching for professors, setting the scopes for authority and responsibilities for each position, evaluating work performance results and planning the development of professors.

2.3 Planning the work at the departmental level, planning information and technology systems in budget management and control, administration and public relations for the dissemination of results or grades at the academic departmental level.

2.4 Academic services for society were composed of academic service planning and projects for society and seminars aimed at disseminating academic knowledge and integrating academic services with education and research.

2.5 Planning for teaching methods, textbook writing, modernizing the content of the subject taught and studies aimed at searching for new technology in education.

2.6 Setting the direction for research at the academic departmental level, searching for funding sources for internal and external research at the college to professors at the academic departmental level to produce quality research findings for implementation in the learning management process.

2.7 Take action toward the performance of educational quality assurance at the academic departmental level, in concurrence with the educational quality assurance system and mechanisms of the college's educational quality evaluation committee, evaluating the educational quality assurance system internally as appointed by the college's highest-ranking executive. At least half of the auditors must be trained in the auditor's courses offered by the Office of the Higher Education Commission (OHEC). Furthermore, the college level requires an external quality auditor who has passed training in OHEC courses and the chairperson of the evaluation committed must have passed chairman's training.

The instrumentation employed in the educational quality assurance evaluation at the academic departmental level included a self–assessment report composed of components and indicators of responsibility in compliance with the Praboromarajchanok Institute, under the guidelines for preparing self–assessment reports, performing internal quality assessment at the academic departmental level, reporting the results of the evaluation and providing feedback. The auditing or evaluation committee will unofficially report the results at a meeting and offer opportunities to ask questions. Next, the auditing or evaluation committee will prepare a report on the evaluation or audit and report the main points of the results, good practice, points for improvement and recommended guidelines for development to the recipients of the audit or evaluation.

3. Conceptual Framework

Development of an education quality assurance system at the departmental level implemented an action research concept aimed at solving problems and developing activities by making modifications and changes (Stringer, E.T.; 2007) with the following steps: Step 1–Planning by studying, analyzing and specifying problem conditions of the educational quality assurance system at the departmental level in addition to planning development; Step 2–Acting by developing the education quality assurance system; Step 3–Observing by viewpoint audits and assessing outcomes from development and Step 4–Reflecting by consideration performance and implementing the outcomes to modify and develop the educational quality assurance system at the departmental level.

Methodology

This study employed action research in developing the educational quality assurance system at the departmental level at Prachomklao College of Nursing, Phetchaburi. The methodology for the research can be divided into the following four steps:

Step 1 Planning -- The studying, analysis, identification of the problems, conditions, situation and barriers and optimal practice for educational quality assurance at the academic departmental level and drawing up development plans for the following aspects: 1) quality assurance at the academic departmental level; 2) quality audit at the academic departmental level; 3) quality evaluation at the academic departmental level; 4) indicators and criteria for evaluation at the academic departmental level, Prachomklao College of Nursing, Phetchaburi. The sample group was selected through purposive sampling under the following inclusion criteria: persons appointed by the college to serve as academic departmental evaluation committee members (26 people); persons appointed by the college with the responsibility for indicators (44 people); a deputy director of the academic group (1 person), a head of course management (1 person) and heads of three academic departments (3 people).

Step 2 Acting -- The development of educational quality assurance at the academic departmental level was carried out in the following areas:

1) quality assurance at the academic departmental level; 2) quality audits at the academic departmental level; 3) quality evaluation at the academic departmental level; 4) indicators and evaluation criteria at the academic departmental level. The findings from Step 1 were analyzed in conjunction with the study of the concepts, theory, document analysis and relevant research in order to develop a draft of educational quality assurance at the academic departmental level on the basis of feasibility and joint understanding of the work team in terms of educational quality assurance. The aforementioned was then made into a manual on educational quality assurance at the academic departmental level and processed to develop educational quality assurance at the academic departmental level of Prachomklao College of Nursing, Phetchaburi.

The sample group was selected through purposive sampling under the following inclusion criteria: persons appointed by the college to serve as academic departmental evaluation committee members (26 people); a person appointed by the college with responsibility for indicators (44 people); a deputy director of the academic group (1 person), a head of course management (1 person) and heads of three academic departments (3 people). Next, the aforementioned was submitted to five experts who were registered as presidents for educational quality assurance at the Bureau of Higher Education by using Item Objective Congruence (IOC) index to develop the draft on educational quality assurance at the academic departmental level by verifying suitability and feasibility for the implementation.

Step 3 Observation -- The test results used the model of educational quality assurance at the academic departmental level. It was developed by a researcher with a manual on educational quality assurance and was newly created as a research instrument to observe audits and evaluation on development results in the following areas: 1) quality control at the academic departmental level; 2) quality audit at the academic departmental level; 3) quality evaluation at the academic departmental level; and 4) indicators and evaluation criteria at the academic departmental level in the first round of evaluation for the 2013 academic year in December of 2013.

Step 4 Reflecting -- Consideration on work performance and evaluation of educational quality assurance at the academic departmental level. All of the educational quality evaluation committees, the person responsible for performance indicators, a regional supervisor, a course management supervisor, and deputy directors of academic departments all work on a quality cycle. The results were then used to make improvements in the educational quality assurance at the academic departmental level in the following areas: 1) quality assurance at the academic departmental level; 2) quality audit at the academic departmental level; 3) quality evaluation at the academic departmental level; and 4) indicators and evaluation criteria at the academic departmental level. The second round took place in the 2013 academic year (May 2014) by using the same sample group as in Steps 1 and 2.

Instrumentation and Data Collection

This instrument comprised 1) a 5-level rating scale and open-ended questions adapted by the research of Jongrak Atiwattanachai (2011). The instrument was verified for content validity by three qualified experts and improvements were made. Next, the instrument was submitted to a pilot study at Boromarajonani College of Nursing, Songkhla and an Alpha coefficient of 0.82 was obtained. 2) The educational quality assurance at the academic departmental level was composed of guidelines for work operations and a manual on educational quality evaluation at the academic departmental level; 3) The form for verification and evaluation of results for the development of quality indicators for educational quality assurance at the academic departmental level, Prachomklao College of Nursing, Phetchaburi, was composed of indictors, results for the execution for each evaluation criteria, list of evidence, self-evaluation results and guidelines for the development of indicators in the evaluation at the academic departmental level; 4) Focus group interview forms on the issue of indicators, nature of work operations, the use of the manual on educational quality assurance at the academic departmental level, including barriers, recommendations and improvement guidelines.

Data Collection - the researcher requested approval from the director to collect data at its staff meeting. Next, the following procedures were followed -- 1) planning, 2) acting, 3) observing and 4) reflecting.

Data Analysis - quantitative data were analyzed using descriptive statistics (percentage, mean, and standard deviation) while qualitative data were analyzed and summarized into key issues on research findings.

Result

The research findings revealed the following:

1. Findings on analysis of the conditions and circumstances of problems and optimal practice in the Educational Quality Assurance System at the academic departmental level, Prachomklao College of Nursing, Phetchaburi Province

The analysis of staff members' opinions regarding the conditions of the educational quality assurance system at the academic department level, Prachomklao College of Nursing, Phetchaburi Province revealed the opinions of management to be high ($\bar{x}$ = 3.69, S.D = 0.51). The three items with the highest scores were "Having a clear structure for the managerial system for educational quality assurance within the academic department" ($\bar{x}$ =4.21, S.D=0.72), followed by continually preparing quality assurance operation plans within academic departments" ($\bar{x}$ = 4.15, S.D = 0.78), and "Having mechanisms for educational quality assurance within academic departments" ($\bar{x}$ = 4.06, S.D = 0.67). The three items with the lowest scores were "Building knowledge and understanding for personnel involved with quality assurance within academic departments to a moderate degree" ($\bar{x}$ = 2.85, S.D = 0.92), followed by "Providing news and information service, giving suggestions and consultation on educational quality assurance at a moderate level" ($\bar{x}$ = 3.08, S.D = 1.15). The three items with the lowest scores were "Constructing knowledge and understanding for staff involved with educational quality assurance within academic departments at a moderate level" ($\bar{x}$ = 2.85, S.D = 0.92), followed by "Providing news and information service, giving suggestions and consultation on educational quality assurance within academic departments to a moderate degree" ($\bar{x}$ = 3.08, S.D = 1.15), and following up and evaluating educational quality assurance work plans at academic departments to a moderate degree" ($\bar{x}$ = 3.23, S.D = 0.90). In terms of a high degree of participation ($\bar{x}$ = 3.64, S.D = 0.52), the three items with the highest scores were "Participate in planning and setting the department's quality management policy to a high degree" ($\bar{x}$ = 3.79, S.D = 0.61), followed by "Participates in analysis of the agency's strengths and weaknesses to a high degree" ($\bar{x}$ = 3.77, S.D = 0.58), and "Serving on a committee performing work in various fields to a high degree ($\bar{x}$ = 3.60, S.D = 0.60). The three items with three lowest scores were "Preparation manual on educational quality assurance within academic departments to a high degree" ($\bar{x}$ = 3.56, S.D = 0.61), followed by ""Participates in setting agreements and requirements for educational quality assurance within academic departments to a high degree" ($\bar{x}$ = 3.56, S.D = 0.61), "Participates in expressing opinions and recommendations on educational quality assurance within academic departments to a high degree" ($\bar{x}$ = 3.56, S.D = 0.54). Internal audit and quality evaluation" was high ($\bar{x}$ = 3.60, S.D = 0.55) and the three items with the highest scores were "The evaluator possesses a high level of understanding in audit criteria and method under the same set of standards" ($\bar{x}$ = 3.71, S.D = 0.50), followed by "The committee possesses a high level of knowledge, ability and ethics" ($\bar{x}$ = 3.69, S.D = 0.51), and "The committee conducts a high level of consideration on quality manual as well as documents from academic departments" ($\bar{x}$ = 3.69, S.D = 0.51). The three items with the lowest scores were "Organizes meetings to clarify objectives to a high degree" ($\bar{x}$ = 3.52, S.D = 0.54), followed by "Allows opportunities for personnel attending the meeting to discuss, inquire, and express opinions to a high degree" ($\bar{x}$ = 3.52, S.D = 0.54), and "Focuses on actual work

performance rather than documentary evidence to a high degree" ($\bar{x}$ = 3.56, S.D = 0.61). As for overall picture, the personnel had a high level of opinion regarding the situation of educational quality assurance at the academic departmental level to a high degree" ($\bar{x}$ = 3.66, S.D = 0.52).

2. Development of Educational Quality Assurance at the Academic Level, Prachomklao - College of Nursing, Phetchaburi Province

The details of the two cycles of work performance yielded the following: 1) The standard indicators for educational quality assurance at the academic level, Prachomklao College of Nursing, Phetchaburi were developed in the first round: The Standard criteria of the Bureau of Higher Education for 2010 and revised version of elements, indicators and criteria for educational quality assurance of the Nursing Council and The Praboromarajchanok Institute for 2013 were used. The elements and indicators were then reduced in order to obtain criteria for evaluating individual indicators with 1 element, 4 indicators and 27 criteria. 2) The Educational Quality Assurance System at the Academic Departmental Level, Prachomklao College of Nursing, Phetchaburi were developed in the second round: The educational quality assurance system at the academic department level, Prachomklao College of Nursing, Phetchaburi, is composed of three main systems, namely, quality control, quality verification and quality evaluation systems. Three elements for the performance comprise elements concerned with 1) management; 2) staff participation and 3) internal audit and quality evaluation by quality committees shared responsibility for the development of educational quality assurance system at the academic departmental level. There were handled for quality control and work plan preparation at the academic departmental level by complying with work plans and following up on work performance evaluation and quality audit by verifying work performance in compliance with work plans and reporting results to the Deputy Director of Academic Affairs and Academic Managing Director in the form of reports on completed projects/ activities. The academic level quality audit is performed by the academic department internal quality evaluation committee once per academic year within a half cycle (June through November). The quality evaluation is performed by the academic departments' internal quality evaluation committee once at the end of the academic year. Continual development is performed by analysis of the academic departments' internal quality evaluation results. Next, improvement plans were prepared. In addition, the Strategy and Quality Development Department proposed a development plan according to the evaluation results to the College Board for further consideration of approval.

3. Evaluation results on the development of the educational quality assurance system at the academic departmental level of Prachomklao College of Nursing, Phetchaburi

According to the participatory group meetings and observation, the evaluation results on compliance with the procedures for educational quality assurance at the academic departmental level, in conjunction with the Standards and Quality Assurance Works and the Strategy and Quality Development Department involved taking joint responsibility for the development of educational quality assurance systems at the academic departmental level. Further actions involved planning preparation at the academic departmental level in compliance with work plans and following up on work performance evaluation with quality audits by verifying work performance in compliance with work plans and reporting results to the Deputy Director of Academic Affairs and Academic Managing Director in the form of reports on completed project/activities. Academic departments' were audited and evaluated for quality by the academic department internal quality audit committee at the end of the academic year. Furthermore, continual development was achieved by analyzing evaluation results on quality evaluation at the academic departmental level and preparing development plans according to evaluation results. Moreover, the Strategy and Quality Development Department proposed and submitted a development plan based on evaluation results to the College Board for consideration to approve a suitable, feasible and accurate plan that was easy and convenient to implement with the facilitation of audit and evaluation.

Discussion of the Findings

According to the findings, three key topics can be applied as follows:

1. Studying conditions, situations, obstacles and probable guidelines in for problems in assuring education quality at the departmental level at Prachomklao College of Nursing, Phetchaburi. From an aggregate perspective, the staff had ideas about the aforementioned to a high degree. When considered in terms of individual aspects, the staff members' opinions were highly regarded in all three areas, namely, management, participation, and internal audit and quality evaluation. Their opinions coincided with research that was conducted by the Research Committee, Chalermprakiat Academic Services, Trang (2011) which found staff members' opinions on the condition of the educational quality assurance system to be high in all three aspects, namely, in terms of management, participation and internal audit and quality evaluation. In addition, the aforementioned ideas might have originated with the college's clear policy on educational quality assurance that moving toward a quality corporate culture where importance is given to educational quality assurance by executives and the boards' participation from all sectors involved to review the educational quality assurance system. The committee on the educational quality assurance system is composed of qualified experts and stakeholders to fulfill the mission on all four sides. Furthermore, the people hiring graduates, student representatives on behalf of the student association and the president of the

educational quality assurance club continually share opinions on quality control, quality audit and quality evaluation. Moreover, indicators are used for evaluation at the academic department level and utilize the same criteria for college level evaluation. Hence, the staff members at the academic department level gained a genuine understanding about the indicators and evaluation criteria with an awareness of the significance of quality culture throughout the nursing college. Quality control was practiced to a minimal degree, namely, the faculty upheld by every nursing professor was a main mission and used as criteria for the professional organization and nursing council to designate as key criteria for conducting the teaching mission. The nursing council was responsible for conducting regular quality audits, evaluations and accreditation for the nursing college. The aforementioned findings concurred with a study conducted by Harutai Aadproo (2009) which found quality assurance on the nursing science teaching/learning of nursing educational institutes were exercised by every faculty member, for the most part. A quality assurance committee was established for every faculty. The quality scale used to classify institute quality was from the number of years for which the nursing council accredited the nursing educational institution.

2. According to the results on the development of educational quality assurance at the academic departmental level, Prachomklao College of Nursing, Phetchaburi, on two rounds of development, the findings can be discussed as follows: system indicators were developed, namely 1) Input Indicators -- indicators associated with resources used in the study, learning/teaching in the department; 2) Process Indicators -- indicators showing work performance or the use of processes in academic departments and 3) Output Indicators -- indicators associated with knowledge, skills or satisfaction in the educational system in the department from this operative research process with standard criteria and a pool of knowledge as the foundation, causing the indicator development result to have criteria for individual indicator evaluation as follows: 1 element for producing scholars, 4 indicators mainly involved with quality assurance at the academic departmental level, namely, the system and mechanism for the management of learning/teaching and quality of learning/teaching that falls in line with a resolution of the Nursing Council, effectiveness of learning/teaching, and system and mechanism for the learning achievement development based on the scholars' characteristics. Individual evaluation criteria was used for 27 questions involving all of the learning/teaching in the academic department, which was basically the development of indicators obtained from standard criteria indicators from the Nursing Council. The aforementioned finding concurred with the research of Pannee Paisantaksin et al. (2012) who discovered that indicators of work performance must cover the department's main mission, namely, producing scholars with a quality assurance system at the academic departmental level that requires the provision of a system for internal quality control of various elements potentially affecting the quality of nursing graduates. The department must systematically execute internal quality control and consideration must be given to elements affecting the quality of nursing graduates. Furthermore, audit and evaluation systems are also required for internal work

performance; 2) Quality assurance at the academic level involved the review of work performance of internal quality control that was set up by the academic department. It involved a review system that focused on whether or not the academic department had a quality control system, the extent to which the system developed was used and whether or not quality procedures had been set in place to make academic management credible within the department; and 3) The educational quality assurance at the academic departmental level was a process of evaluating work performance. The aggregate perspective was to determine the extent of qualitative changes. The input, process and output factors using the PDCA process with P for planning, D for doing, C for checking and A for acting. The aforementioned finding concurred with the study of Pannee Paisantaksin et al. (2012) which stated that the quality assurance work of the nursing college under the Praboromarajchanok Institute must be evaluated on all three systems, namely, 1) quality control system, 2) quality audit system, and 3) quality evaluation system. The finding also concurred with evaluation results by surveying and collecting qualitative data obtained by Haruthai Aadproo (2009) which revealed that most nursing institutions use quality assurance in learning/teaching according to performance indicators. The use of PDCA and systematic formats comprising input, process and output factors for elements in operating educational quality assurance at the academic departmental level, Prachomklao College of Nursing, Petchaburi involving the following: **1) Management -** The principles for the management of the educational quality assurance at the academic departmental level of Prachomklao College of Nursing, Phetchaburi Province: 1) Setting Objectives, policy and plans; 2) Setting the administrative structure for the educational quality assurance system; 3) Establishing a committee to be responsible for educational quality assurance; and 4) Setting mechanisms for educational quality assurance with efficiency and performance in line with the established system; 5) Assuring that the control, audit and evaluation of educational quality assurance within the academic department level was carried out in line with operational plans in every element and indicator; 6) Monitoring and evaluating the educational quality assurance operational plans; and 7) Making adjustments in the educational quality assurance system based on the evaluation results at Prachomklao College of Nursing, Phetchaburi; **2) Staff participation comprised** 1) participative planning to set quality management policy; 2) participation in setting requirements and agreement for educational quality assurance and 3) service as various task forces and 4) participation in offering opinions and recommendations regarding educational quality assurance and **3) Internal audits and quality evaluation** with the following findings: 1) The committee on educational quality assurance was prepared to serve as an evaluator of educational quality assurance, and possessed an understanding in audit criteria and methods under the same set of standards in addition to knowledge, ability and ethics; 2) Auditors possess knowledge and understanding of criteria for educational quality assurance. The aforementioned finding concurred with a study conducted by Harutai Aadproo (2009) which found the three main principles in development to be participation by all parties involved, educational quality assurance

as part of daily routines and, more importantly, knowledge on educational quality assurance provided for both professors and students. The aforementioned finding also concurred with the study of Wanpen Pongkai (2006) which found the indicators for work performance with the highest score was "Having work plans and work guidelines for educational quality assurance".

3. The results of the evaluation of the development of educational quality assurance at the academic departmental level of Prachomklao College of Nursing, Phetchaburi Province, and from the participative group meetings revealed the results of the evaluation. Guidelines for compliance with the procedures for educational quality assurance at the academic departmental level in conjunction with the standard and quality assurance work with the strategy and quality development department are to share responsibility for the development of the educational quality assurance system at the academic departmental level and quality control; work plan preparation at the academic departmental level with adherence to work plans, follow up on work performance evaluation and quality audits. Concerning the analysis of the quality evaluation at the academic departmental level and preparation of development plans in line with the results of the evaluation results, the strategy and quality development group proposed development plans line with the results of the evaluation to the board for consideration of approval. The aforementioned findings concurred with the study of Haruthai Aadproo (2009) entitled the Development of An Educational Quality Assurance Model for Teaching Nursing Science: Apply Assessment of Needs and Multi-Site Assessment. The findings revealed that quality assurance on nursing science education to be good, suitable, feasible, accurate, beneficial and highly innovative.

Recommendations for Utilizing the Research Findings.

1. In implementing educational quality assurance, the corporate context should be considered as the fundamental factor with readiness in terms of various aspects. Most importantly, in personnel management, both personnel who are members of the evaluation committee or personnel in the department receiving quality control, audit and evaluation should gain understanding and participate together in the work to be carried out.

2. In evaluating educational quality at the academic departmental level, a definite timeframe should be set in order to gain informative data that is systematic in response to work operations in the department and the data can serve as feedback data for executives to use in decision-making for the development of an educational quality assurance system at the academic departmental level.

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Poster Presentations

A Model of Utility Perception of Quality Assurance System, Kasetsart University

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Abstract

The purposes of this research were to construct a model of utility perception of the quality assurance system of Kasetsart University and to compare pre-and post-personnel behaviors of utility perception of the quality assurance system at Kasetsart University. The one-group pretest-posttest design was used in this study. The study group consisted of 43 volunteers drawn from the executives, lecturers, and practitioners of quality assurance from all faculties across the Bangkhen Campus of Kasetsart University. The research instruments were a test of information perception about the quality assurance system and a questionnaire on the utility of the quality assurance system. The statistics used for data analysis were frequency, percentage, arithmetic mean and standard deviation.

The results showed that the model of utility perception of the quality assurance system that was constructed consisted of training activities integrating information and knowledge about quality assurance, particularly on the 2nd factor of quality assurance on graduate production and approaches/ theories on utility perception of the quality assurance system. The analysis of post-training behaviors showed that personnel had a greater knowledge of the quality assurance system than before undertaking the training. In addition, the study revealed that the personnel had a greater perception of the contribution of the quality assurance system than before undertaking the training.

Keywords: Model, Perception, System, Quality Assurance, Kasetsart University

Introduction

Quality assurance of education is a helpful tool for strengthening education. According to Section 47, 48 and 49 under Chapter 6 on Educational Standards and Quality Assurance in the National Education Act, the system of quality assurance of education is required for educational quality and standards at all levels. This system comprises both internal and external quality assurance. Internal quality assurance is an important part of educational administration, whereby an annual report is required to be submitted regularly to upper level and related stakeholders. For further development and improvement, an annual report is also required to be publicized. In addition, the Office for National Education Standards and Quality Assessment (ONESQA) is also identified in the Act to evaluate the national education management and to examine the quality of education provided by various educational institutions.

Furthermore, the Office of the Higher Education Commission (OHEC), formerly the Bureau of Government University, is a supervisory office for all universities that has launched policies and practical guidelines. Since July 8, 1996 it allows all institutions of higher education to develop their own internal systems as a tool for the development of educational management that includes other research missions, academic services and the conservation of Thai National Arts and culture.

Kasetsart University (KU) is an institution that has complied with the policies and practical guidelines. Thus, since June 30, 2003, KU has also launched its policies and practical guidelines and has implemented them continuously in practice and has made some achievements since then. An important mechanism for achievement is the participation of all personnel to move the internal system of quality assurance (QA) forward. However, the mechanism will be effective when all KU personnel have proper knowledge and understandings about their own obligations as well as their applications of QA. This also depends on each person's perception. Perception is a psychological concept which affects ones' own behavior. People are likely to act on their ideas and perceptions. Therefore, proper perception is of primary importance for further learning. People must have proper perceptions before having a good grasp of knowledge, concepts, understanding and attitudes. In other words, people's proper perceptions influence their actions. Accordingly, it seems reasonable to investigate whether a model of utility perception of the quality assurance system of Kasetsart University will enable KU administrators, lecturers as well as staff within the system to implement all 4 missions effectively and qualitatively.

Objectives

1. To construct a model of utility perception of the quality assurance system at Kasetsart University

2. To compare pre- and post-personnel behaviors of utility perception of quality assurance system of Kasetsart University

Operational Definitions

Utility Perception of the Quality Assurance System at Kasetsart University refers to all behaviors by KU personnel indicating utility awareness of the QA system including related mechanisms to conduct the standards by the Office of the Higher Education Commission (OHEC) and the Office for National Education Standards and Quality Assessment (ONESQA). Also, utility perception refers to having the proper knowledge of QA information at KU.

The Model of Utility Perception of the Quality Assurance System at Kasetsart University refers to the QA system including related mechanisms in all KU faculties to supervise and control, to examine and to evaluate (judge) the educational output that had been completed in order to comply with the criteria set by OHEC and ONESQA.

Conceptual Frameworks

Concepts of Educational QA

The QA system as an important mechanism that is used to promote at all levels of educational organizations to efficiently achieve their goals in educational reform. In order to create self-confidence, the standards of national educational quality at the level of the national goals and as direction and practical guidelines to determine appropriate educational standards in global current trends have been specified. Nevertheless, the problems of educational quality and standard of the graduates are commonly found. Accordingly, institutions at all levels have a duty to have specified measures to enhance the educational quality as an approach to assure that all institutions can produce graduates with quality according to criteria and goals of those programs.

According to academics, it can be concluded that educational QA assures all educational stakeholders - students' parents, communities and society by all institutions of that they can effectively provide education with internal audit and assessment of the results.

The significance of educational QA is that it is an important mechanism used to promote the educational administration and management by all institutions to be systematically effective and to assure all educational stakeholders-students' parents, communities and society of that all institutions can produce graduates with quality according to criteria and goals of those programs.

Concepts of Perception

Perception is a foundation to understand an existing environment. Whenever any stimulus impacts any of our perceptional organs, the organ will send the impact feeling to our brain to interpret and perceive it. Moreover, personal perception is a developing process to impress each other in personal relationships. Thus, perception is so important in daily life behaviors of humans in many ways, such as attitude, mental health, and learning how to solve problems.

According to academics, it can also be concluded that perception is a process that the brain in interpreting the information from stimulus after the impact at such sensory organs including eyes, ears, tongue, and skin. However, the interpretation depends on a person's own experience or background, and how he/she always chooses to respond according to what is the most meaningful. In addition, perception is an expression of individual knowledge and understanding.

The above statement is also in accord with the concept by Katz (1990) in that, in any situation, an individual interpretation occurs following an interpretation and refinement of his or her feelings through seeing, hearing and touching; that depend on his or her previous experience or background, self-image, tasks, feelings and ideologies.

Measurement of interpretation is similar to attitude, value, and personality because the interpretation is part of them. Thus it can be done through observation, questionnaires, and psychological tests with stimuli.

Related Literature

Arakpotechong, Wutthichai (2011) in his study, "Influences of interpretation, attitude, and participation on operational efficiency by supporting staff as according to the internal QA system under-supervision government universities" found that the overall degree of those influences was found at the high level.

Chaitanu, Kitja, et. al., (2012) in "A Study of Quality Assurance Results Rajamangala University of Technology" found that the overall average of QA performances was at the good level.

Ming Cheng (2010) provided a study, entitled, "Audit cultures and quality assurance mechanisms in England: A study of their perceived impact on the work of academics" found that 2 out of 3 of all academics reported that internal audit and QA were part of their normal bureaucracy and least affected their performance. Meanwhile 1 out of 3 viewed that the cultures and mechanisms were beneficial to teaching improvement.

Research Method

This study employed an experiment-One-Group Pretest-Posttest Design including 43 volunteer participants of KU personnel (administrators, lecturers and staff)

Treatment variable was the model of utility perception in terms of the training whereas the utility perception by KU personnel was the dependent variable that was measured by the Behavioral Measurement Test and the Self-Assessment Test.

Data were analyzed in terms of frequency, percentage, average mean and standard deviation.

Results

The results concluded as follows:

1) The Model of Utility Perception of the Quality Assurance System of Kasetsart University is like a QA mechanism to operate, supervise, control and evaluate the quality of the education provided by the faculty in terms of training and integrating QA knowledge and information of Element 2: graduate production and approaches/theories of Utility Perception of the Quality Assurance System.

2) Regarding proper pre/post knowledge among 43 KU Personnel to perceive information of the KU QA System, it was found that their knowledge (24 out of 25 items) had increased after the training. Thus, in terms of proper knowledge and information of QA, their perceptions included: 1. QA significance, 2. input indicator, 3. process indicator, and 4. outcome indicator.

3) Regarding the self-assessment test, it was found that perception was higher among 43 volunteer participants in the average mean 0.39 about the Model of Utility Perception of the Quality Assurance System and that they could apply the Model of Utility Perception of the Quality Assurance System to their work.

Recommendations

Further recommendations are as follows:

1) KU should use the model from this study with other elements according to the 4 missions of KU. For example, Element 4-Research and Element 5-Academic Services to Society.

2) KU should organize QA training for those in other organizations to extend the results from a common understanding of QA.

3) KU should monitor the staff that had passed the training to see whether or not they have applied the knowledge in their jobs through increased scores in the following years' quality assessment.

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Learning Package on Food and Beverage Service Competency Development for Upper High School Students

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Abstract

The purposes of this research were to 1) identify food and beverage service competency for upper high school students in order to earn special income during their studies, 2) develop a competency-based learning package on food and beverage service for them and 3) verify the learning package. This study was conducted in three phases. During the first phase, a survey study was conducted to identify food and beverage service competency for upper high school students. 3 groups in this study were 300 upper high school students experiencing food and beverage service jobs during their studies under the jurisdiction of the Secondary Educational Service Area Office 2, and included 65 food experts from the same jurisdiction, and 70 food entrepreneurs in Bueng Kum, Bangkok. Sample groups of 30 upper high school students, 30 food experts and 40 food entrepreneurs were selected by purposive sampling technique. 3 questionnaire forms were used to collect data from the selected samples. Collected data was presented to a focus group of 8 food service experts for identification of essential competencies and its practical use for upper high school students for income earning during their studies. The second phase was the development of a competency-based learning package on food and beverage service. For the third phase, verifying the learning package on food and beverage service competency was conducted by administering the learning package to 30 volunteer high school students from 4 schools in the Bangkok area.

At the end of the first phase, 7 essential competency areas for food and beverage service required for upper high school students for earning income during their studies were identified as follows: 1) manner 2) customer service mind 3) occupational characteristic of food and beverage service 4) language and communication 5) service skill on food and beverage 6) personal health and 7) knowledge of food and beverage service. The developed competency-based learning package included 2 parts: knowledge development and skill development. The knowledge development part consisted of 4 volumes of knowledge booklets and a self-assessment booklet. For skill development part, a set of practical skills workshop were designed and organized in a real setting. The results of the learning package indicated that the volunteer students were satisfied with all aspects of the knowledge part and their learning outcomes were detected. For the skill practice part, volunteer students gained a very high degree of competence on food and beverage service.

Keywords: Learning Package, Competency, Food and Beverage Service, High School Students

Introduction

According to the Act of National Education, 1999, and the 2nd modified version in 2002, the Ministry of Education (MoE) focuses on the overall educational reform to make education accessible to all, to promote life-long education, to develop education and learning, to produce the manpower of quality and competency, and to strengthen all levels of educational institutions as well as human resources development. In addition, the MoE crafted the 4-year Operational Plan, 2012-2015 and the Development Strategies of MoE, 2012-2015 as guidelines for its implementation. Some Strategy examples include Strategy 5: to have a policy to develop a curriculum to allow learners to learn what interests them and to have the aptitudes for maximizing the highest efficiency of self-development. Another example includes Strategy 7–8 that provides increased opportunities in education and to promote increased employment; to reduce the gap to educational-access and to provide the bodies of knowledge for life-long learning and informal learning. Learners are encouraged to get a job and to earn special income during their studies. According to a survey, there are 4 jobs popular among students to earn special income. They are 1) a waiter / waitress in a restaurant that is located in a department store, 2) direct sales, 3) a dresses & clothes vendor, and 4) typing services at a school or university.

To use a competency to develop human resources in terms of individual selection, performance development, and selection of people with extra skills is now necessary. Moreover, the Division of Employment Promotion, in the Department of Employment provides special jobs for those students above 15 years to earn special income, to gain work experience, to practice endurance and perseverance and to be taught more responsibility, punctuality, and self-discipline before entering the job market after graduation. In the academic year 2013, there were 34,128 vacant jobs for students. Among these, a waiter/ waitress in a restaurant or at a fast food shop, a product consultant, a general secretary, a cashier and a call-operator were very popular. According to data of students in the Secondary Education Zone 2 in Bangkok graduating in academic year 2012, there were 17,448 graduates that were employed, whereas 900 graduates were still unemployed. This suggests that many students were interested in working during their studies; therefore, schools and other related organizations should support them to be ready for employment based on their interests and aptitudes.

Due to such significance as earlier mentioned, a learning package to shape students' experience is necessary. Also, the learning package will be very helpful for those students and help fulfill their work skills which are crucial for their career paths in the near future.

Objectives

1. To identify food and beverage service competency for upper high school students in order to earn income during their studies.

2. To develop a competency-based learning package on food and beverage service for high school students.

3. To verify the learning package for its feasibility and practicality.

Operational Definitions In this study, these definitions particularly are:

The Learning Package to Develop the Competency of Food and Beverage Service refers to the booklets together with the self-assessment form, the series of training activities in food stalls for skill development and the handbook of the training activities.

The Competency of Food and Beverage Service refers to skills for those new waiters /waitresses to be trained among the high-school students

The High-school Students refer to those students studying in Matthayom Suksa 4-6 in government high schools, a secondary educational service office area II in Bangkok.

Conceptual Framworks

1. Concepts of Competency

At the beginning of 1970, an American psychologist and educator conducted a study on the reason why the performances by different individuals differed and concluded that the individual of better performances typically possesses "the competency". An individual personality can be compared to an iceberg; thus, the upper part at sea level that can be easily seen as knowledge together with various skills; whereas the lower part that is below sea level is not noticeable, and hard to develop and measure (Akkharabawworn, 2006).

Competency refers to hidden basic characteristics of an individual that leads to good performance according to the specified criteria in one's duty and responsibility. It can be increased through training and self-development. According to the Human Resources Management Center at the Department of Industrial Works, in order to develop human competency, there are typically 2 main approaches: one is through training and the other is through non-training. Development of human competency is commonly required in general organizations and businesses. Therefore, the curriculum at basic education level should be competency-based containing various types of training.

2. Food and Beverage Service

Food and beverage services require special capacities and skills. They must be learned. The main objective is to respond to and to satisfy consumers of food and beverage in terms of environment, tastes of the food and beverage as well as service qualities. The food and beverage services are typically 2 types: commercial and non-commercial. Jewjaroensakul (2007) indicated that for those food shop owners, the waiter/waitress is so important for their success. Required characteristics of the ideal waiter/waitress comprises the following: hard work, perseverance, good a personality, a nice appearance, service mindedness, good manners and etiquette, cheerfulness, kindness, good at human relations, honesty, good conversationalist, has determination, and has a good knowledge of food and beverage services. In addition, how to serve is not less important than the tastes and qualities of the food and beverages. A polite waiter/waitress with a good look and personality is important as a charming attraction to any restaurant. He or she not only serves but also looks after the tidiness of the restaurant together with its tables, chairs and other instruments.

It is also his or her responsibility to accept reservations requests from customers, to clear and clean the tables, to say thanks to those customers that are leaving the restaurant.

3. Learning Package Development

Basic approaches and theories for learning package development are as follows: 1st Approach: This is based upon the psychological principle of individual difference. 2nd Approach: This is to transform teacher-based teaching to the student-based one. 3rd Approach: This is to reorganize the production system and usage of audio-visual materials. 4th Approach: This is to create interactions between teacher & student, student & student, and student & environment to that enables students to share an activity with one another. 5th Approach: This is to create learning, based on the psychological principle of learning for efficiency. It can therefore be concluded that the learning package for competency development on food and beverage service is integrated based on each of the 1st, 4th and 5th Approaches, respectively.

Research Method

This study was conducted in 3 phases:

Phase I: A survey study was conducted to identify food and beverage service competency. The population included 300 upper high school students who had experiences as waiters and waitresses to earn special income during their studies the under the jurisdiction of the secondary educational service office area II in Bangkok, and included 65 nutrition specialists-secondary education teachers and 65 food shop owners from the same area.

Samples for this study included 30 high school students, 30 teachers and 40 food shop owners that were purposively selected.

The Instruments: There were 3 sets of questionnaires that were reviewed by 3 experts. Each set contained 2 parts: the 1st part on demographic data and the 2nd part on the competency of food and beverage service. They were sent to selected groups of samples via air mail.

100 percent of all questionnaires that had been sent had been completed and returned. Data was analyzed by using frequency and percentage. The results of the analysis were submitted to be considered in the Focus Group Discussion of 8 experts of food and beverage service.

Phase II: Development of a competency-based learning package on food and beverage service.

The results of the 1st phase were analyzed and applied to develop the learning package that consists of two parts as follows: 1) Knowledge development: text, subject, learning unit, concept, indicator and activity and 2) Skills development: practical activity series and activity handbook.

Phase III: Verification of the learning package on food and beverage service, and to examine the effectiveness of the developed learning package.

3.1 Volunteers that included upper high school students were recruited.

3.2 The learning package from the 2nd phase was trialed among 30 student volunteers for a week. Afterward, the volunteers had to fill in the self-assessment form and respond to the questionnaire.

3.3 The volunteers were trained as waiters/ waitresses according to the practical activity series in the learning package.

3.4 The volunteers assessed themselves, and they were assessed as waiters/ waitresses through observation by an expert and the manager of Viva Food Shop. In addition, the instruments were also reviewed by experts.

Results

They concluded the following:

Phase I: Survey study was conducted to identify food and beverage service competency. The Obtained Competency contains 7 dimensions:

1. Etiquette and good manners
2. Customer attending skills
3. Required characteristics for career
4. Skills to serve food and beverage
5. Personal hygiene
6. Knowledge to serve food and beverage
7. Skills of language and communication

Phase II: In the development of a competency-based learning package on food and beverage service, the learning package on food and beverage service contains 2 main parts: 1) Knowledge Development, and 2) Skills Development.

The Knowledge Development Series consists of 4 booklets: 1. Introduction to Waiter/Waitress Works; 2. How to Do It as a waiter/waitress; 3. How to Prepare Yourself before Serving; and 4. How to Serve in the Way to Impress Your Customers.

The Skills Development Series consists of practical activity series and an activity handbook. The series combines skill, teaching, illustration and practical training from the hours of 9.00-14.00 hrs. and at 16.00- 21.00 hrs. at real food shops.

Phase III: Verification of the learning package on food and beverage service: Student volunteers reflected its practicality and feasibility as follows:

The Format: The Series of 4 booklets were perceived to be very suitable.

The Text: Its content is correct, valid, and suitable in terms of good usage of the language, of good arrangement, illustration, indicators, etc.

The Further Application: The package is very suitable for further application by any food shops to develop their employees.

The Benefits: The package is very useful for those who are entering the career as a waiter or waitress. It is also helpful to those students wishing to earn extra income during their studies.

Recommendations

Regarding the study findings, recommendations are as follows:

1. Following the success of this study, those schools that aim to develop the competency of food and beverage service among their students, should organize the collaborative project with food stalls nearby, under the supervision of the secondary educational service office area II with the utilization of the learning package.

2. According to the finding that the students could successfully do the job, therefore the learning package should be modified according to the context of each school.

3. Nevertheless, some flaws had been found. For example, the 5th competency of proper handling of utensils in food and beverage service, and the 6th competency of arrangement of food supplements, both of which require additional training. Moreover, the training hours should be increased from 10 to 20 hours for skills training, overall.

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